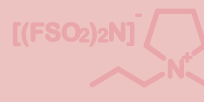
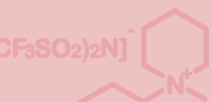
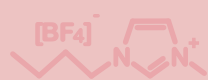
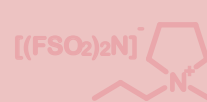
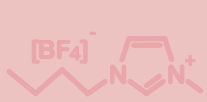


第6版

# イオン液体 総合カタログ

Ionic liquids





## 試薬を安全にご使用いただくために

---

- 試薬には発火や爆発し、重大事故を引き起こす物質や、誤飲・吸入による健康被害、接触による損傷を引き起こす物質がありますので、取扱いに注意してください。また、使用する際は、環境に負荷を与えない配慮をお願いいたします。
- 試薬は毒物及び劇物取締法や労働安全衛生法、消防法などに従って安全対策と適切な管理が必要ですので、試薬ラベルを参考にしてください。また、製品を安全に管理するために SDS（安全データシート）を提供しています。弊社ホームページ (<https://www.kanto.co.jp>) の製品情報検索サイト「Cica-Web」からダウンロードしてください。
- 弊社の製品は、試薬（試験、検査、研究用として使用する薬品）、食品添加物、医療用などの用途が明確にされていますので、用途を確認してからご使用ください。



## パンフレットについて

---

- 価格は 2019 年 11 月現在の価格です。消費税は含まれておりません。
- 価格欄が☆印の製品は、都度見積もりが必要です。お手数ですが、弊社販売店にお問い合わせください。
- 価格、規格、包装容器などは予告なく変更することがあります。  
最新情報は弊社ホームページ (<https://www.kanto.co.jp>) の製品情報検索サイト「Cica-Web」もしくは電子版「総合カタログ」でご確認ください。
- ご注文の際は、製品番号、製品名、容量（包装）を明記してください。
- ご注文やお受取りの際に、登録や使用許可、安定供給に必要な情報、法的に要求される手続きが必要な製品がありますので、ご理解とご協力をお願いします。



## イオン液体とは

---

イオン（アニオン、カチオン）のみで構成され、融点が 100℃以下の化合物をイオン液体 (Ionic Liquids) と言います。イオン液体は難揮発性、難燃性、高イオン伝導性、および優れた電気化学特性などの特長を併せ持つ物質です。そのため、エネルギー・バイオ・環境関連分野をはじめとする様々な分野における材料の一つとして大いに期待されています。すべてのイオン液体が前述した特長を網羅しているわけではありませんが、基礎データの取得から実用化の検討まで、産学官の研究開発が拡大し「イオン液体だからこそ実現できる」展開も提案されてきています。

弊社では様々なアニオン、カチオンの組み合わせで約 370 品目のイオン液体を取り揃えています。

# CONTENTS

	頁
1- アリル -3- アルキルイミダゾリウム系イオン液体	4
セルロース溶解性イオン液体	7
よう素系イオン液体	8
脂肪族系イオン液体	9
日清紡ホールディングス株式会社製 脂肪族系イオン液体	10
日本化学工業株式会社製 四級ホスホニウム系イオン液体	12
FSI (ビス(フルオロスルホニル)イミド)系イオン液体	13
イオリテック社製 LiBETI・BETI 系イオン液体	14
ソルビオニック社製 イオン液体・金属塩	15
<b>製品リスト</b>	
Imidazolium based ionic liquids	16
Pyrrolidinium based ionic liquids	47
Pyridinium based ionic liquids	52
Piperidinium based ionic liquids	62
Ammonium based ionic liquids	64
Phosponium based ionic liquids	69
Other ionic liquids	73
Related products	74
<b>INDEX</b>	
化合物名	76
CAS RN®	80
製品番号	82

## 凡例

①	②	③	④	⑤	⑩	⑪	⑫	⑬	⑭	⑮
1-Ethyl-3-methylimidazolium tetrafluoroborate		CAS RN® : 143314-16-3	分子式 : C <sub>6</sub> H <sub>11</sub> N <sub>2</sub> BF <sub>4</sub>	分子量 : 198.0	14644-53				5 mL	11,000
					14644-33				25 mL	30,000
					49514-28	ILT	IL-0006-HP	> 98%	25 g	29,000
					49514-30	ILT	IL-0006-HP	> 98%	100 g	51,000
					49527-90	ILT	IL-0006-UP	99%	25 g	43,000
⑥ 15 °C	⑦ 34 cP (25 °C)	⑧ d 1.28 (24 °C)	⑨ 14.1 mS/cm (25 °C)							

① 製品名	② 構造式	③ CAS RN®	④ 分子式	⑤ 分子量
⑥ 融点	⑦ 粘度	⑧ 密度(比重)	⑨ 導電率	⑩ 製品番号
⑪ メーカー略号	⑫ メーカー品番	⑬ 純度	⑭ 包装	⑮ 価格

※メーカーによって品名が異なる場合がございます。

<メーカー略号>

- ACR ----- ACROS ORGANICS 社製  
(Thermo Fisher Scientific K.K.)
- ILT ----- IoLiTec GmbH 社製
- SOLVI ----- SOLVIONIC 社製
- M ----- Merck KGaA 社製  
(Merck Millipore)

## グレード

### <関東化学製品>

純度項目は空欄ですが、製品毎に水分値等の保証項目を設けております。

当社ホームページ内の「Cica-Web」にてご確認ください。併せて法規も記載しております。

### <ACROS 製品>

純度項目は空欄ですが、製品毎に保証項目を設けております。

ACROS 社のホームページにてご確認ください。

※製品の色に関して

極力無色透明になるよう検討しておりますが、現状の製造工程上高純度品でも色調が強い製品がございます。ご理解の程お願い申し上げます。

## 物性値

物性値は、合成方法の違いによる微量の不純物が影響するため、文献によって異なります。

本カタログでは、実測値を明記している化合物もございますが、基本的には文献値を参考にしております。

参考データとしてご理解いただきたくお願い申し上げます。

### ● EMIm X の物性値 (25 °C)

アニオン	融点 (°C)	密度 (g/cm <sup>3</sup> )	粘度 (mPa·s)	導電率 (mS/cm)
BF <sub>4</sub> <sup>-</sup>	11 <sup>1)</sup> , 15 <sup>2)</sup>	1.24 <sup>1)</sup> , 1.28 <sup>2)</sup>	43 <sup>1)</sup> , 31.8 <sup>2)</sup>	13.0 <sup>1)</sup> , 13.6 <sup>2)</sup>
PF <sub>6</sub> <sup>-</sup>	62 <sup>1)</sup>	1.56 <sup>1)</sup>	-	5.2 <sup>1)</sup>
CH <sub>3</sub> SO <sub>3</sub> <sup>-</sup>	39 <sup>3)</sup>	1.25 <sup>3)</sup>	160 <sup>3)</sup>	2.7 <sup>3)</sup>
CF <sub>3</sub> SO <sub>3</sub> <sup>-</sup>	-10 <sup>3)</sup> , -9 <sup>4)</sup>	1.383 <sup>3)</sup>	42.7 <sup>3)</sup>	9.29 <sup>3)</sup>
[(CF <sub>3</sub> SO <sub>2</sub> ) <sub>2</sub> N] <sup>-</sup>	-15 <sup>1)</sup> , -16 <sup>2)</sup>	1.52 <sup>1)</sup> , *, 1.518 <sup>2)</sup>	28 <sup>1)</sup> , 40.7 <sup>2)</sup>	8.4 <sup>1)</sup> , 5.7 <sup>2)</sup>
[(C <sub>2</sub> F <sub>5</sub> SO <sub>2</sub> ) <sub>2</sub> N] <sup>-</sup>	-1 <sup>1)</sup> , -19 <sup>5)</sup>	-	61 <sup>1)</sup>	3.4 <sup>1)</sup>

※ 22 °C

1) A. A.B.McEwen, H.L.Ngo, K. LeCompte, and J.L.Goldman, *J.Electrochem. Soc.*, 146, 1687 (1999)

2) A.Noda, K.Hayamizu, and M.Watanabe, *J.Phys. Chem.*, B, 105, 4603 (2001)

3) E.I. Cooper and E.J.M. O' Sullivan, *Proc. Of 8th Int. Symp.*, 382 (1992)

4) P.BonHote, A.-P.Dias, M.Armand, N.Papageorgiou, K.kalyanasundaram, and M.Gratzle, *Inorg. Chem.*, 35, 1168 (1996)

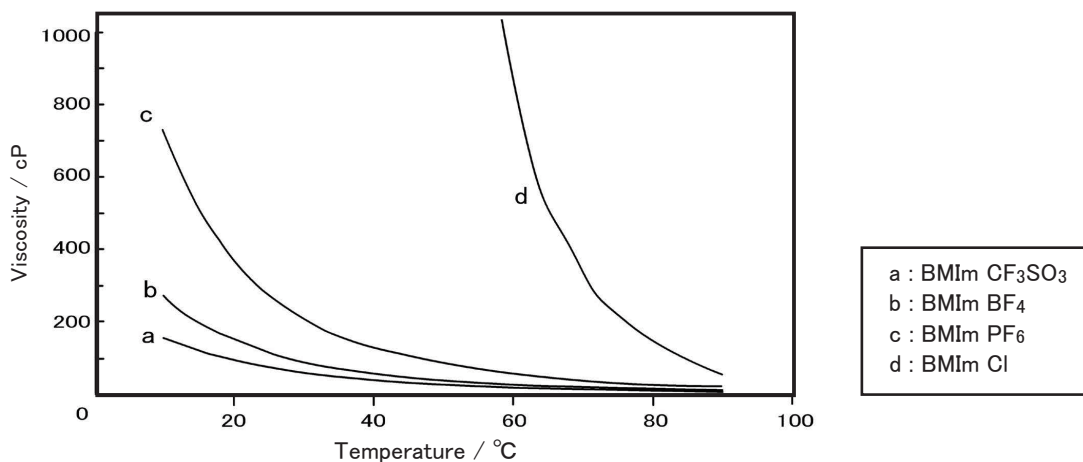
5) M.Yosizawa, W.Ogihara, and H.Ohno, *Electrochem.Solid-State Lett.*, 4, E25 (2001)



## 温度変化による粘度

代表的なイオン液体 1-Butyl-3-methylimidazolium triflate、1-Butyl-3-methylimidazolium tetrafluoroborate、1-Butyl-3-methylimidazolium hexafluorophosphate、1-Butyl-3-methylimidazolium chloride の温度と粘度の関係を以下の図に示します。

図より、僅かな温度変化で粘度が大きく変化する点や、構成イオンの違いが粘度に大きく影響することが分かります。



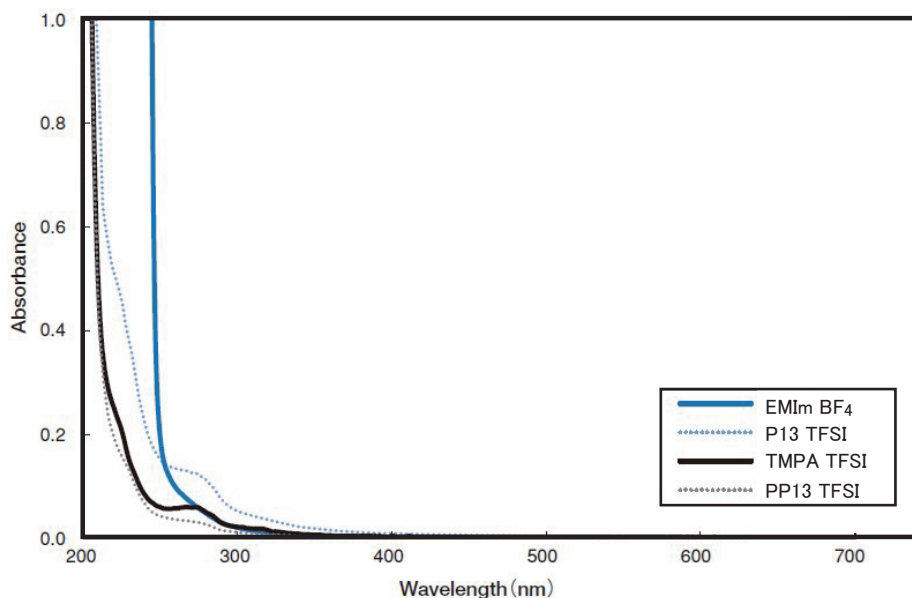
温度変化による粘度



## 紫外可視吸収スペクトル

代表的なイオン液体 1-Ethyl-3-methylimidazolium tetrafluoroborate、*N*-Methyl-*N*-propylpyrrolidinium bis(trifluoromethanesulfonyl)imide、*N,N,N*-Trimethyl-*N*-propylammonium bis(trifluoromethanesulfonyl)imide、*N*-Methyl-*N*-propylpiperidinium bis(trifluoromethanesulfonyl)imide の紫外可視吸収スペクトルを以下の図に示します。

EMIm BF<sub>4</sub> はわずかに吸収がありますが、可視領域 (350 ~ 700 nm) での吸収はほとんど観察されないため、外観上は無色となります。



紫外可視吸収スペクトル

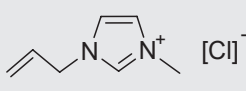
# 1-アリル-3-アルキルイミダゾリウム系イオン液体

東京農工大学の<sup>6)</sup>大野教授らによって開発された1-アリル-3-アルキルイミダゾリウム系イオン液体のうち、代表的な化合物を製品化しております。これらは、従来のイオン液体に比べ極性が高く、多様な化合物の溶解が期待されます。イオリテック社製品と共にご利用ください。

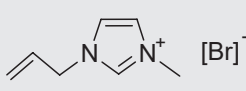
6) T. Mizuno, E. Marwanta, N. Matsumi, and H. Ohno, *Chem. Lett.*, 33, 204, 1360.

## 製品リスト

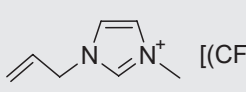
### 1-Allyl-3-methylimidazolium chloride 【AMIm Cl】

 CAS RN <sup>®</sup> : 65039-10-3 分子式 : C <sub>7</sub> H <sub>11</sub> ClN <sub>2</sub> 分子量 : 158.6 47 °C	49515-44	ILT	IL-0022-HP	> 98%	25 g	19,000
	49515-45	ILT	IL-0022-HP	> 98%	100 g	33,000

### 1-Allyl-3-methylimidazolium bromide 【AMIm Br】

 CAS RN <sup>®</sup> : 31410-07-8 分子式 : C <sub>7</sub> H <sub>11</sub> BrN <sub>2</sub> 分子量 : 203.1 58 °C 1.60 mS/cm	01986-55				5 g	8,000
	01986-35				25 g	18,000
	01986-15				250 g	95,000

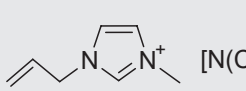
### 1-Allyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide 【AMIm TFSI】

 CAS RN <sup>®</sup> : 655249-87-9 分子式 : C <sub>9</sub> H <sub>11</sub> F <sub>6</sub> N <sub>3</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 403.3 35 cP (25 °C)    d 1.49 (29 °C)    8.87 mS/cm (30 °C)	01988-55				5 mL	9,500
	01988-35				25 mL	30,000
	01988-15				250 mL	120,000
	49518-81	ILT	IL-0239-HP	99%	25 g	29,000
	49518-82	ILT	IL-0239-HP	99%	100 g	66,000

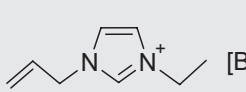
### 1-Allyl-3-methylimidazolium tetrafluoroborate 【AMIm BF<sub>4</sub>】

 CAS RN <sup>®</sup> : 851606-63-8 分子式 : C <sub>7</sub> H <sub>11</sub> BF <sub>4</sub> N <sub>2</sub> 分子量 : 210	01987-55				5 mL	9,000
	01987-35				25 mL	22,000
	01987-15				250 mL	95,000

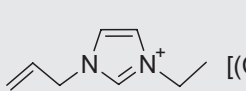
### 1-Allyl-3-methylimidazolium dicyanamide

 CAS RN <sup>®</sup> : 917956-73-1 分子式 : C <sub>9</sub> H <sub>11</sub> N <sub>5</sub> 分子量 : 189.2 18 cP (25 °C)    d 1.11 (24 °C)    17.0 mS/cm (30 °C)	49518-83	ILT	IL-0240-HP	> 98%	25 g	23,000
	49518-84	ILT	IL-0240-HP	> 98%	100 g	51,000

### 1-Allyl-3-ethylimidazolium bromide 【AEIm Br】

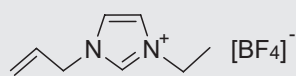
 CAS RN <sup>®</sup> : 652134-09-3 分子式 : C <sub>8</sub> H <sub>13</sub> BrN <sub>2</sub> 分子量 : 217.1 55 °C	01930-55				5 g	7,500
	01930-35				25 g	18,000
	01930-15				250 g	78,000

### 1-Allyl-3-ethylimidazolium bis(trifluoromethanesulfonyl)imide 【AEIm TFSI】

 CAS RN <sup>®</sup> : 652134-11-7 分子式 : C <sub>10</sub> H <sub>13</sub> F <sub>6</sub> N <sub>3</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 417.4 31 cP (25 °C)    d 1.45	01932-55				5 mL	9,000
	01932-35				25 mL	30,000
	01932-15				250 mL	130,000

# 1-アリル-3-アルキルイミダゾリウム系イオン液体

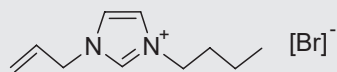
## 1-Allyl-3-ethylimidazolium tetrafluoroborate 【AEIm BF<sub>4</sub>】



CAS RN<sup>®</sup> : 945732-42-3  
 分子式 : C<sub>8</sub>H<sub>13</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 224

01931-55	5 mL	8,000
01931-35	25 mL	24,000
01931-15	250 mL	90,000

## 1-Allyl-3-butylimidazolium bromide 【ABIm Br】



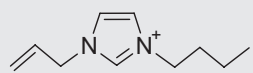
d 1.24

CAS RN<sup>®</sup> : 863498-30-0  
 分子式 : C<sub>10</sub>H<sub>17</sub>BrN<sub>2</sub>  
 分子量 : 245.2

0.50 mS/cm

01933-55	5 mL	8,000
01933-35	25 mL	20,000
01933-15	250 mL	84,000

## 1-Allyl-3-butylimidazolium bis(trifluoromethanesulfonyl)imide 【ABIm TFSI】



46 cP (25 °C)

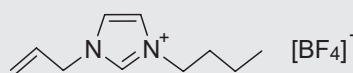
d 1.38

CAS RN<sup>®</sup> : 863498-34-4  
 分子式 : C<sub>12</sub>H<sub>17</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 445.4

1.53 mS/cm

01935-55	5 mL	10,000
01935-35	25 mL	30,000
01935-15	250 mL	110,000

## 1-Allyl-3-butylimidazolium tetrafluoroborate 【ABIm BF<sub>4</sub>】

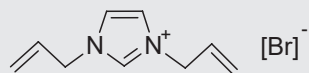


CAS RN<sup>®</sup> : 863498-32-2  
 分子式 : C<sub>10</sub>H<sub>17</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 252.1

1.22 mS/cm

01934-55	5 mL	9,000
01934-35	25 mL	24,000
01934-15	250 mL	94,000

## 1,3-Diallylimidazolium bromide 【AAIm Br】



827 cP (25 °C)

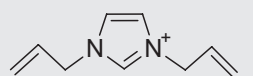
d 1.32

CAS RN<sup>®</sup> : 31483-71-3  
 分子式 : C<sub>9</sub>H<sub>13</sub>BrN<sub>2</sub>  
 分子量 : 229.1

0.74 mS/cm

11475-55	5 mL	8,000
11475-35	25 mL	20,000
11475-15	250 mL	93,000

## 1,3-Diallylimidazolium bis(trifluoromethanesulfonyl)imide 【AAIm TFSI】



31 cP (27 °C)

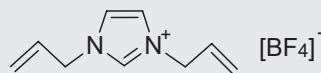
d 1.43

CAS RN<sup>®</sup> : 803732-17-4  
 分子式 : C<sub>11</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 429.4

2.63 mS/cm

11477-55	5 mL	10,000
11477-35	25 mL	30,000
11477-15	250 mL	124,000

## 1,3-Diallylimidazolium tetrafluoroborate 【AAIm BF<sub>4</sub>】



CAS RN<sup>®</sup> : 852699-06-0  
 分子式 : C<sub>9</sub>H<sub>13</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 236

2.44 mS/cm

11476-55	5 mL	10,000
11476-35	25 mL	29,000
11476-15	250 mL	120,000

# 1-アリル-3-アルキルイミダゾリウム系イオン液体

## 溶解性

### ●各溶媒と混合時の相溶性 (体積比 1:1)

溶媒	AMIm Br	AMIm TFSI	AMIm BF <sub>4</sub>	AEIm Br	AEIm TFSI	AEIm BF <sub>4</sub>
水	○	×	○	○	×	○
メタノール	○	○	○	○	○	○
エタノール	○	○	×	○	○	△ <sup>※2</sup>
2-プロパノール	○	○	×	○	○	×
アセトン	×	○	○	△	○	○
酢酸エチル	×	○	△	×	○	△ <sup>※3</sup>
アセトニトリル	○	○	○	○	○	○
テトラヒドロフラン	×	○	×	×	○	△ <sup>※2</sup>
ジエチルエーテル	×	△	×	×	△ <sup>※1</sup>	×
ヘキサン	×	×	×	×	×	×
トルエン	×	△	×	×	△ <sup>※1</sup>	×
ジクロロメタン	○	○	○	○	○	○
クロロホルム	○	○	○	○	○	○

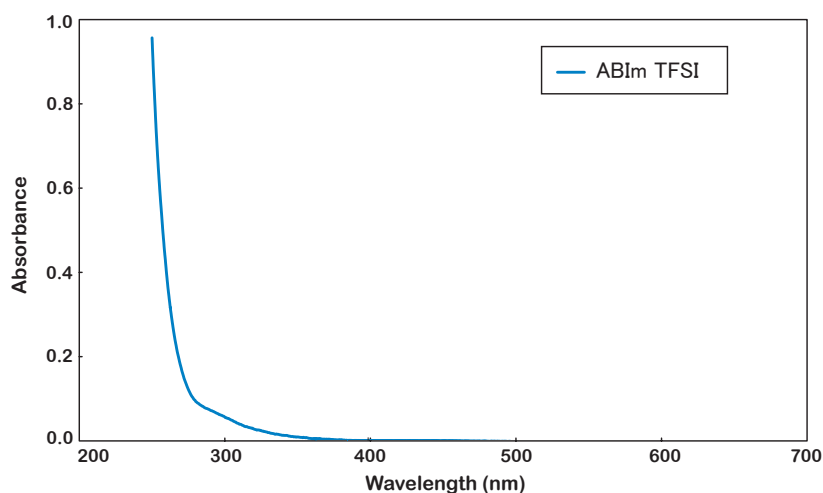
溶媒	ABIm Br	ABIm BF <sub>4</sub>	ABIm TFSI	AAIm Br	AAIm BF <sub>4</sub>	AAIm TFSI
水	○	×	×	○	△ <sup>※2</sup>	×
メタノール	○	○	○	○	○	○
エタノール	○	○	○	○	△ <sup>※5</sup>	○
2-プロパノール	○	○	○	○	△ <sup>※3</sup>	○
アセトン	○	○	○	○	○	○
酢酸エチル	×	○	○	×	△ <sup>※6</sup>	○
アセトニトリル	○	○	○	○	○	○
テトラヒドロフラン	×	○	○	×	○	○
ジエチルエーテル	×	×	○	×	×	△ <sup>※6</sup>
ヘキサン	×	×	×	×	×	×
トルエン	×	△ <sup>※4</sup>	×	×	×	△ <sup>※6</sup>
ジクロロメタン	○	○	○	○	○	○
クロロホルム	○	○	○	○	○	○

○：溶解、△：一部溶解、×：不溶

※1：8割溶解    ※4：4割溶解  
 ※2：5割溶解    ※5：7割溶解  
 ※3：3割溶解    ※6：9割溶解

## 紫外可視吸収スペクトル

アリル基を有する代表的なイオン液体である 1-Allyl-3-butylimidazolium bis(trifluoromethanesulfonyl)imide (ABIm TFSI) は外観上無色であり、可視領域 (350 ~ 700 nm) では吸収がほとんど観察されません。





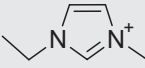
# セルロース溶解性イオン液体

東京農工大学の 大野教授によって研究が盛んに行われているホスホネート系イオン液体を製品化しております。本化合物は、高い極性を示すホスホン酸誘導体をアニオンとしており、セルロースを穏和な条件で溶解することができます<sup>7)</sup>。

7) JY. Fukaya, K. Hayashi, M. Wada, and H. Ohno, *Green Chem.*, 2008, 10, 44-46.

## 製品リスト

### 1-Ethyl-3-methylimidazolium methylphosphonate

 CAS RN® : 1137959-66-0 分子式 : C <sub>7</sub> H <sub>15</sub> N <sub>2</sub> O <sub>3</sub> P 分子量 : 206.2 d 1.19	14670-35	25 mL	26,000
	14670-25	100 mL	58,000

## 溶解性

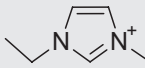
### ●各溶媒と混合時の相溶性 (体積比 1:1)

溶媒	1-Ethyl-3-methylimidazolium methylphosphonate
水	○
メタノール	○
エタノール	○
アセトン	○
酢酸エチル	×
アセトニトリル	○
テトラヒドロフラン	△
ジエチルエーテル	×
ヘキサン	×
トルエン	×
ジクロロメタン	○
クロロホルム	○

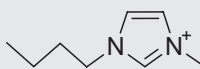
○ : 溶解、△ : 一部溶解、× : 不溶

## 関連製品

### 1-Ethyl-3-methylimidazolium acetate

 CAS RN® : 143314-17-4 分子式 : C <sub>8</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub> 分子量 : 170.2	49514-02	ILT	IL-0189-TG	95%	25 g	25,000
	49514-03	ILT	IL-0189-TG	95%	100 g	45,000

### 1-Butyl-3-methylimidazolium chloride

 CAS RN® : 79917-90-1 分子式 : C <sub>8</sub> H <sub>15</sub> ClN <sub>2</sub> 分子量 : 174.7 65 °C	05068-53				5 g	7,000
	05068-33				25 g	17,000
	35409-2A	ACR	35409-0050		5 g	9,300
	35409-1A	ACR	35409-0250		25 g	10,200
	49514-53	ILT	IL-0014-HP	99%	25 g	13,000
	49514-54	ILT	IL-0014-HP	99%	100 g	24,000

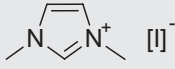
# よう素系イオン液体

よう素系イオン液体は色素増感型太陽電池などの分野で以前より検討されていた化合物ですが、一部の製品はよう素が要因となり、着色が確認されておりました。

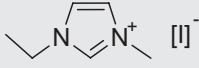
本製品は、極限まで着色を抑えたイオン液体です。

## 製品リスト

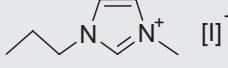
### 1,3-Dimethylimidazolium iodide

 81 °C	CAS RN® : 4333-62-4	10506-35	25 g	18,000
	分子式 : C <sub>5</sub> H <sub>9</sub> IN <sub>2</sub> 分子量 : 224	10506-25	100 g	55,000

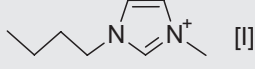
### 1-Ethyl-3-methylimidazolium iodide

 80-85 °C	CAS RN® : 35935-34-3	14669-35	25 g	24,000
	分子式 : C <sub>6</sub> H <sub>11</sub> IN <sub>2</sub> 分子量 : 238.1	14669-25	100 g	55,000

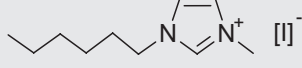
### 1-Methyl-3-propylimidazolium iodide

 935 cP (25 °C)    d 1.54 (24 °C)    0.96 mS/cm (30 °C)	CAS RN® : 119171-18-5	32520-35	25 mL	20,000
	分子式 : C <sub>7</sub> H <sub>13</sub> IN <sub>2</sub> 分子量 : 252.1	32520-25	100 mL	42,000

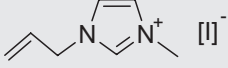
### 1-Butyl-3-methylimidazolium iodide

 1183 cP (25 °C)    d 1.48 (25 °C)    0.52 mS/cm (25 °C)	CAS RN® : 65039-05-6	04235-35	25 mL	25,000
	分子式 : C <sub>8</sub> H <sub>15</sub> IN <sub>2</sub> 分子量 : 266.1	04235-25	100 mL	50,000

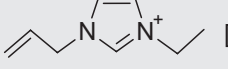
### 1-Hexyl-3-methylimidazolium iodide

 1730 cP (25 °C)	CAS RN® : 178631-05-5	18010-35	25 mL	26,000
	分子式 : C <sub>10</sub> H <sub>19</sub> IN <sub>2</sub> 分子量 : 294.2	18010-25	100 mL	55,000
	0.25 mS/cm (25 °C)			

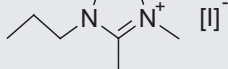
### 1-Allyl-3-methylimidazolium iodide

 57 °C	CAS RN® : 65039-07-8	01120-35	25 g	23,000
	分子式 : C <sub>7</sub> H <sub>11</sub> IN <sub>2</sub> 分子量 : 250.1	01120-25	100 g	48,000

### 1-Allyl-3-ethylimidazolium iodide

	CAS RN® : 920981-07-3	01119-35	25 mL	22,000
	分子式 : C <sub>8</sub> H <sub>13</sub> IN <sub>2</sub> 分子量 : 264.1	01119-25	100 mL	40,000

### 1,2-Dimethyl-3-propylimidazolium iodide

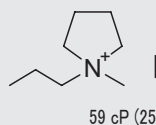
 94 °C	CAS RN® : 218151-78-1	11507-35	25 g	20,000
	分子式 : C <sub>8</sub> H <sub>15</sub> IN <sub>2</sub> 分子量 : 266.1	11507-25	100 g	55,000

# 脂肪族系イオン液体

国立研究開発法人産業技術総合研究所の松本氏らが開発した脂肪族系イオン液体を製品化しております。

## 製品リスト

### N-Methyl-N-propylpyrrolidinium bis(trifluoromethanesulfonyl)imide 【P13 TFSI】

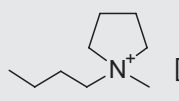


59 cP (25 °C)    d 1.43 (29 °C)    4.92 mS/cm (30 °C)

CAS RN<sup>®</sup>: 223437-05-6  
分子式 : C<sub>10</sub>H<sub>18</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 408.4

26050-55	5 mL	9,500
26050-35	25 mL	33,000

### N-Butyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide 【P14 TFSI】

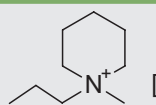


-18 °C    72 cP (25 °C)    d 1.40 (23 °C)    2.12 mS/cm (20 °C)

CAS RN<sup>®</sup>: 223437-11-4  
分子式 : C<sub>11</sub>H<sub>20</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 422.4

26125-53	5 mL	7,000
26125-33	25 mL	31,000

### N-Methyl-N-propylpiperidinium bis(trifluoromethanesulfonyl)imide 【PP13 TFSI】

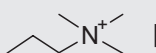


176 cP (25 °C)    d 1.41 (23 °C)    2.12 mS/cm (30 °C)

CAS RN<sup>®</sup>: 608140-12-1  
分子式 : C<sub>11</sub>H<sub>20</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 422.4

26039-53	5 mL	9,500
26039-33	25 mL	33,000

### N,N,N-Trimethyl-N-propylammonium bis(trifluoromethanesulfonyl)imide 【TMPA TFSI】



CAS RN<sup>®</sup>: 268536-05-6  
分子式 : C<sub>8</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 382.3

41110-53	5 mL	9,500
41110-33	25 mL	33,000

## 溶解性、電位窓

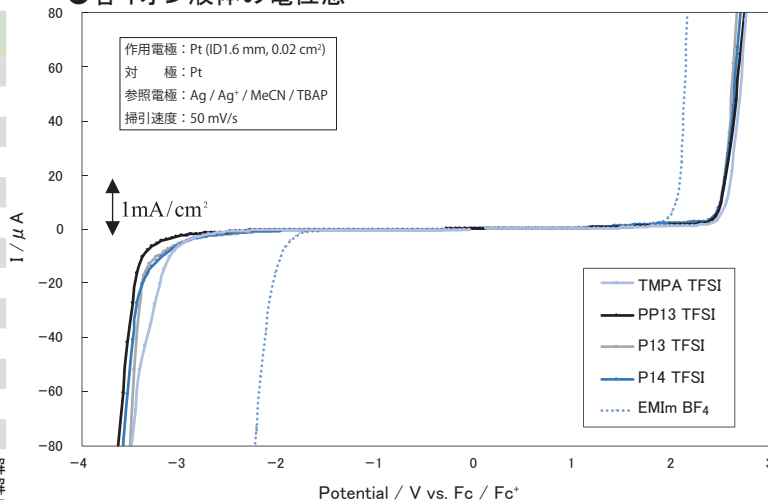
### ●各溶媒と混合時の相溶性 (体積比 1:1)

溶媒	P13 TFSI	P14 TFSI	PP13 TFSI	TMPA TFSI
水	×	×	×	×
メタノール	○	○	○	○
エタノール	○	○	○	○
2-プロパノール	○	○	○	○
アセトン	○	○	○	○
酢酸エチル	○	○	○	○
アセトニトリル	○	○	○	○
テトラヒドロフラン	○	○	○	○
ジエチルエーテル	△※ <sup>1</sup>	△※ <sup>4</sup>	×	△※ <sup>1</sup>
ヘキサン	×	×	×	×
トルエン	△※ <sup>3</sup>	△※ <sup>3</sup>	△※ <sup>3</sup>	△※ <sup>2</sup>
ジクロロメタン	○	○	○	○
クロロホルム	○	○	○	○

○ : 溶解、△ : 一部溶解、× : 不溶

※1: 2割溶解  
※2: 5割溶解  
※3: 9割溶解  
※4: 4割溶解

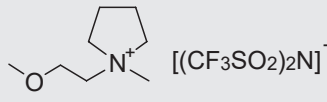
### ●各イオン液体の電位窓



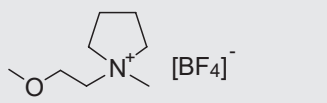
# 日清紡ホールディングス株式会社製 脂肪族系イオン液体

## 製品リスト

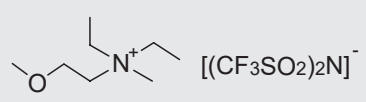
### *N*-(2-Methoxyethyl)-*N*-methyl-pyrrolidinium bis(trifluoromethanesulfonyl)imide 【MEMP TFSI】

 <p>CAS RN<sup>®</sup>: 757240-24-7 分子式: C<sub>10</sub>H<sub>18</sub>F<sub>6</sub>N<sub>2</sub>O<sub>5</sub>S<sub>2</sub> 分子量: 424.4</p> <p>-95 °C      50 cP (25 °C)      d 1.45      3.8 mS/cm</p>	25966-55	5 mL	9,500
	25966-35	25 mL	33,000
	25966-05	500 g	☆

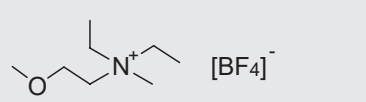
### *N*-(2-Methoxyethyl)-*N*-methyl-pyrrolidinium tetrafluoroborate 【MEMP BF<sub>4</sub>】

 <p>CAS RN<sup>®</sup>: 464927-76-2 分子式: C<sub>8</sub>H<sub>18</sub>BF<sub>4</sub>NO 分子量: 231</p> <p>18 °C      154 cP (25 °C)      d 1.23      2.9 mS/cm</p>	25967-45	10 mL	6,200
	25967-25	100 mL	41,000
	25967-05	500 g	☆

### *N,N*-Diethyl-*N*-methyl-*N*-(2-methoxyethyl)ammonium bis(trifluoromethanesulfonyl)imide 【DEME TFSI】

 <p>CAS RN<sup>®</sup>: 464927-84-2 分子式: C<sub>10</sub>H<sub>20</sub>F<sub>6</sub>N<sub>2</sub>O<sub>5</sub>S<sub>2</sub> 分子量: 426.4</p> <p>67 cP (25 °C)      d 1.42      2.62 mS/cm</p>	11468-55	5 mL	9,500
	11468-35	25 mL	32,000
	11468-05	500 g	☆

### *N,N*-Diethyl-*N*-methyl-*N*-(2-methoxyethyl)ammonium tetrafluoroborate 【DEME BF<sub>4</sub>】

 <p>CAS RN<sup>®</sup>: 464927-72-8 分子式: C<sub>8</sub>H<sub>20</sub>NOBF<sub>4</sub> 分子量: 233.1</p> <p>9 °C      272 cP (25 °C)      d 1.17      1.24 mS/cm</p>	11469-45	10 mL	6,000
	11469-25	100 mL	39,000
	11469-05	500 g	☆

## 溶解性

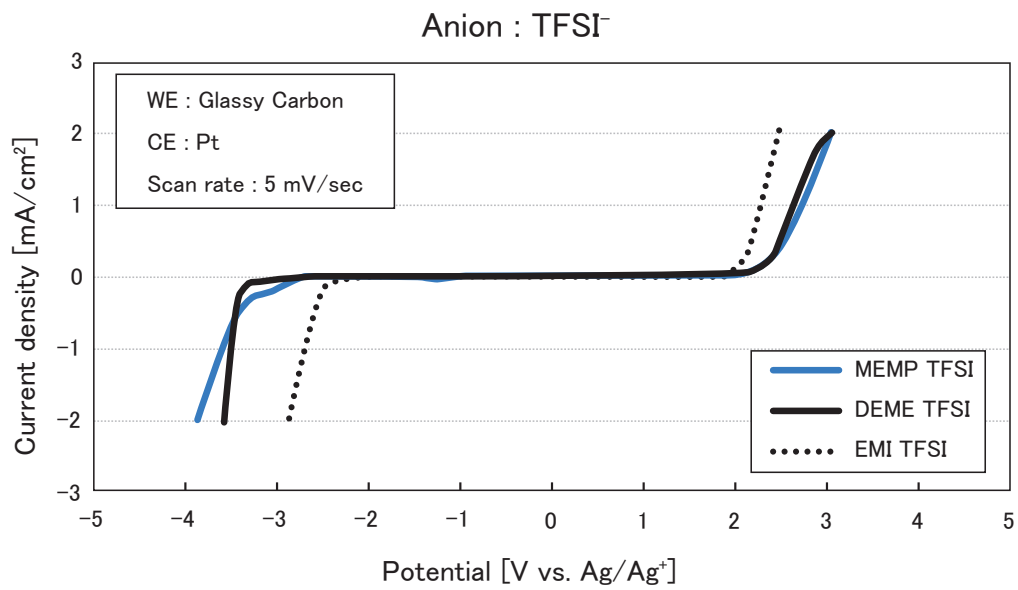
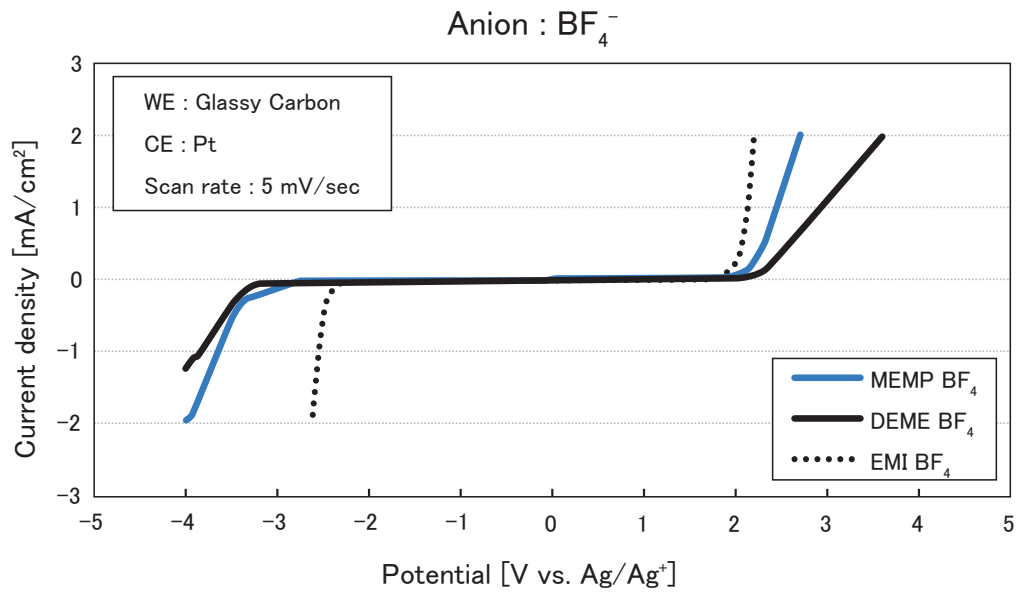
### ●各溶媒と混合時の相溶性 (体積比 1:1)

溶媒	MEMP TFSI	MEMP BF <sub>4</sub>	DEME TFSI	DEME BF <sub>4</sub>
水	×	○	×	○
メタノール	○	○	○	○
エタノール	○	△※ <sup>1</sup>	○	△※ <sup>3</sup>
2-プロパノール	○	△※ <sup>2</sup>	△※ <sup>2</sup>	△※ <sup>4</sup>
アセトン	○	○	○	○
酢酸エチル	○	△※ <sup>1</sup>	○	×
アセトニトリル	○	○	○	○
テトラヒドロフラン	○	△※ <sup>3</sup>	○	△※ <sup>3</sup>
ヘキサン	×	×	×	×
トルエン	○	×	×	×
クロロホルム	○	○	○	○

○: 溶解、△: 一部溶解、×: 不溶

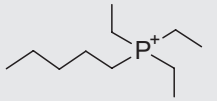
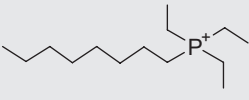
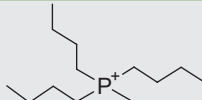
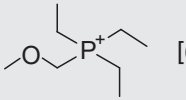
※1: 3割溶解  
※2: 1割溶解  
※3: 2割溶解  
※4: 1割以下溶解

電位窓



# 日本化学工業株式会社製 四級ホスホニウム系イオン液体

## 製品リスト

Triethylpentylphosphonium bis(trifluoromethanesulfonyl)imide 【P2225 TFSI】		CAS RN® : 1010707-47-7	40334-35	25 mL	34,000
	分子式 : C <sub>13</sub> H <sub>26</sub> F <sub>6</sub> NO <sub>4</sub> PS <sub>2</sub> 分子量 : 469.4	17 °C 88 cP d 1.32 1.70 mS/cm			
Triethyloctylphosphonium bis(trifluoromethanesulfonyl)imide 【P2228 TFSI】		CAS RN® : 1002754-38-2	40335-35	25 mL	34,000
	分子式 : C <sub>16</sub> H <sub>32</sub> F <sub>6</sub> NO <sub>4</sub> PS <sub>2</sub> 分子量 : 511.5	< -50 °C (Tg) 129 cP d 1.26 0.98 mS/cm			
Tributylmethylphosphonium bis(trifluoromethanesulfonyl)imide 【P4441 TFSI】		CAS RN® : 324575-10-2	40336-35	25 mL	33,000
	分子式 : C <sub>15</sub> H <sub>30</sub> F <sub>6</sub> NO <sub>4</sub> PS <sub>2</sub> 分子量 : 497.5	16 °C 207 cP d 1.28 0.42 mS/cm			
Triethylmethoxymethylphosphonium bis(trifluoromethanesulfonyl)imide 【P222(101) TFSI】(※当製品は在庫限りで終売となります)		CAS RN® : 1010707-45-5	40366-35	25 mL	34,000
	分子式 : C <sub>10</sub> H <sub>20</sub> F <sub>6</sub> NO <sub>5</sub> PS <sub>2</sub> 分子量 : 427.4	14 °C 35 cP (25 °C) d 1.42 4.4 mS/cm (25 °C)			

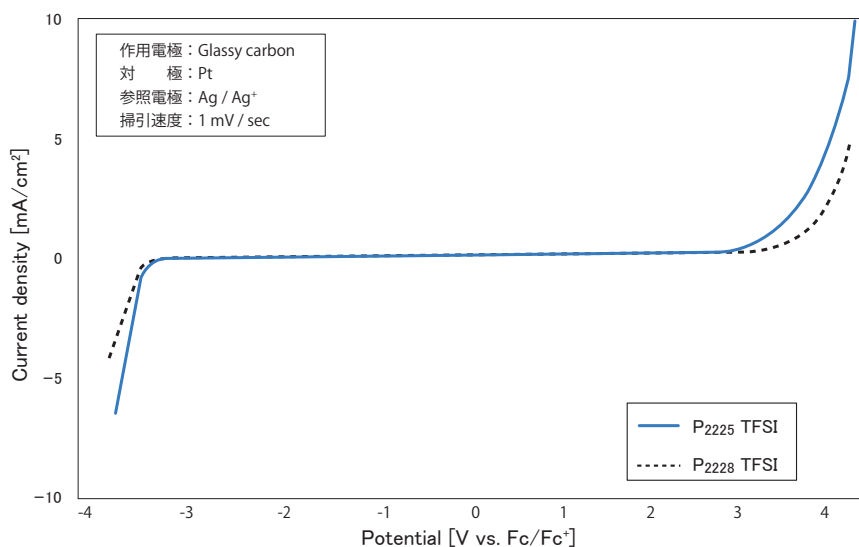
## 溶解性

### ●各溶媒と混合時の相溶性 (体積比 1:1)

溶媒	P2225 TFSI	P2228 TFSI	P4441 TFSI	P222(101) TFSI
水	×	×	○	×
メタノール	○	○	○	○
エタノール	○	○	○	○
アセトン	○	○	○	○
アセトニトリル	○	○	○	○
ヘキサン	×	×	×	×
クロロホルム	○	○	○	○

○ : 溶解、△ : 一部溶解、× : 不溶

## 電位窓

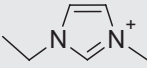


# FSI (ビス(フルオロスルホニル)イミド)系イオン液体

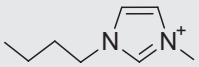
FSI系イオン液体は、TFSI系イオン液体と比べて粘度やイオン伝導率の面で優れていることから、二次電池用電解質として広く検討されております。

## 製品リスト

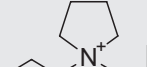
### 1-Ethyl-3-methylimidazolium bis (fluorosulfonyl)imide 【EMIm FSI】

 $[(\text{FSO}_2)_2\text{N}]^-$	CAS RN® : 235789-75-0	14697-35	25 mL	32,000
	分子式 : $\text{C}_6\text{H}_{11}\text{F}_2\text{N}_3\text{O}_4\text{S}_2$ 分子量 : 291.3			
-14 °C      20 cP (23 °C)      d 1.45				

### 1-Butyl-3-methylimidazolium bis(fluorosulfonyl)imide 【BMIm FSI】

 $[(\text{FSO}_2)_2\text{N}]^-$	CAS RN® : 1235234-58-8	05816-35	25 mL	32,000
	分子式 : $\text{C}_8\text{H}_{15}\text{F}_2\text{N}_3\text{O}_4\text{S}_2$ 分子量 : 319.4			
< -50 °C      33 cP (24 °C)      d 1.36 (19 °C)				

### N-Methyl-N-propylpyrrolidinium bis(fluorosulfonyl)imide 【P13 FSI】

 $[(\text{FSO}_2)_2\text{N}]^-$	CAS RN® : 852620-97-4	25978-35	25 mL	34,000
	分子式 : $\text{C}_8\text{H}_{18}\text{F}_2\text{N}_2\text{O}_4\text{S}_2$ 分子量 : 308.4			
-10 °C      41 cP (24 °C)      d 1.35 (29 °C)				

## 溶解性

### ●各溶媒と混合時の相溶性 (体積比 1:1)

溶媒	EMIm FSI	BMIm FSI	P13 FSI
水	×	×	×
メタノール	○	○	○
エタノール	○	○	○
2-プロパノール	×	△ <sup>※1</sup>	×
アセトン	○	○	○
酢酸エチル	○	○	○
アセトニトリル	○	○	○
テトラヒドロフラン	○	○	○
ジエチルエーテル	×	×	×
ヘキサン	×	×	×
トルエン	×	○	×
ジクロロメタン	○	○	○
クロロホルム	○	○	○

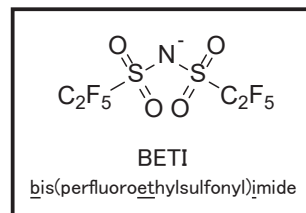
○ : 溶解、△ : 一部溶解、× : 不溶

※ 1 : 1 割溶解

# イオリテック社製 LiBETI・BETI 系イオン液体

イオン液体の代表的なアニオンの1つである BETI (ビス(パーフルオロエチルスルホニル)イミド) をアニオン成分とする「LiBETI」および「BETI 系イオン液体」2 種を取り扱っております。

本製品は、ドイツ IoLiTec GmbH (イオリテック) 社の製品であり、類似構造を有する FSI アニオンおよび TFSI アニオンと同様に電気化学関連分野の電解質等での活用が期待されております。



## 製品リスト

### ● LiBETI

#### 1-Butyl-3-methylimidazolium bis(perfluoroethylsulfonyl)imide

$\text{Li}^+ \text{ } [(\text{C}_2\text{F}_5\text{SO}_2)_2\text{N}]^-$	CAS RN® : 132843-44-8	49520-26	ILT	IK-0016-HP	> 99%	25 g	75,000
	分子式 : $\text{C}_2\text{F}_6\text{LiNO}_4\text{S}_2$ 分子量 : 387.1	49520-27	ILT	IK-0016-HP	> 99%	100 g	☆

### ● BETI 系イオン液体

#### 1-Ethyl-3-methylimidazolium bis(perfluoroethylsulfonyl)imide

$[(\text{C}_2\text{F}_5\text{SO}_2)_2\text{N}]^-$	CAS RN® : 216299-76-2	49520-28	ILT	IL-0320-HP	> 98%	1 g	36,000
	分子式 : $\text{C}_{10}\text{H}_{11}\text{F}_{10}\text{N}_3\text{O}_4\text{S}_2$ 分子量 : 491.3	49520-30	ILT	IL-0320-HP	> 98%	5 g	120,000

#### 1-Butyl-3-methylimidazolium bis(perfluoroethylsulfonyl)imide

$[(\text{C}_2\text{F}_5\text{SO}_2)_2\text{N}]^-$	CAS RN® : 254731-29-8	49520-31	ILT	IL-0321-HP	> 98%	1 g	36,000
	分子式 : $\text{C}_{12}\text{H}_{15}\text{F}_{10}\text{N}_3\text{O}_4\text{S}_2$ 分子量 : 519.4	49520-32	ILT	IL-0321-HP	> 98%	5 g	120,000



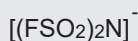
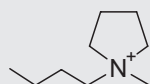
# ソルビオニック社製 イオン液体・金属塩

フランス SOLVIONIC (ソルビオニック) 社の製品を販売しています。イオン液体の代表的なアニオンである「FSI アニオン」および「TFSI アニオン」を成分とする化合物や、Na イオン二次電池・Mg 二次電池等の次世代電池の電解質として注目されているナトリウム塩 (NaFSI、NaTFSI) およびマグネシウム塩 (Mg(TFSI)<sub>2</sub>) を取り扱っております。下記製品以外も取り扱っておりますので製品リストをご参照ください。

## 製品リスト

### ●イオン液体

#### 1-Butyl-1-methylpyrrolidinium bis(fluorosulfonyl)imide

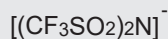
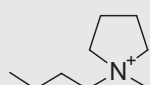


分子式 : C<sub>9</sub>H<sub>20</sub>F<sub>2</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 322.4

49210-20 SOLVI PYR0433A 99.9% 50 g 80,000

#### 1-Butyl-1-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide



CAS RN<sup>®</sup> : 223437-11-4

分子式 : C<sub>11</sub>H<sub>20</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 422.4

-18 °C

72 cP (25 °C)

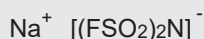
d 1.40 (23 °C)

2.12 mS/cm (20 °C)

49210-19 SOLVI PYR0408A 99.9% 50 g 52,000

### ●金属塩

#### Sodium(I) bis(fluorosulfonyl)imide



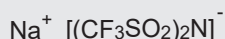
CAS RN<sup>®</sup> : 100669-96-3

分子式 : F<sub>2</sub>NNaO<sub>4</sub>S<sub>2</sub>

分子量 : 203.3

49210-16 SOLVI M1133B > 99.7% 10 g 50,000

#### Sodium(I) bis(trifluoromethanesulfonyl)imide



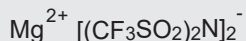
CAS RN<sup>®</sup> : 91742-21-1

分子式 : NaC<sub>2</sub>F<sub>6</sub>NO<sub>4</sub>S<sub>2</sub>

分子量 : 303.1

49210-17 SOLVI M1108C > 99.5% 10 g 42,000

#### Magnesium(II) bis(trifluoromethanesulfonyl)imide



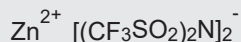
CAS RN<sup>®</sup> : 133395-16-1

分子式 : MgC<sub>4</sub>F<sub>12</sub>N<sub>2</sub>O<sub>8</sub>S<sub>4</sub>

分子量 : 584.6

49210-18 SOLVI M1208C > 99.5% 10 g 42,000

#### Zinc(II) bis(trifluoromethanesulfonyl)imide



CAS RN<sup>®</sup> : 168106-25-0

分子式 : ZnC<sub>4</sub>F<sub>12</sub>N<sub>2</sub>O<sub>8</sub>S<sub>4</sub>

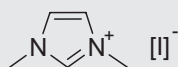
分子量 : 625.7

49210-21 SOLVI M3008C > 99.5% 10 g 43,000

# Imidazolium based ionic liquids

## 1-Alkyl-3-methylimidazolium

### 1,3-Dimethylimidazolium iodide

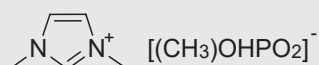


CAS RN<sup>®</sup> : 4333-62-4  
 分子式 : C<sub>5</sub>H<sub>9</sub>IN<sub>2</sub>  
 分子量 : 224.0

81 °C

10506-35				25 g	18,000
10506-25				100 g	55,000
49518-33	ILT	IL-0199-HP	> 98%	25 g	28,000
49518-34	ILT	IL-0199-HP	> 98%	100 g	61,000

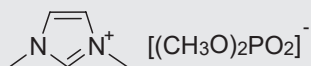
### 1,3-Dimethylimidazolium methylphosphonate



CAS RN<sup>®</sup> : 1048377-03-2  
 分子式 : C<sub>6</sub>H<sub>13</sub>N<sub>2</sub>PO<sub>3</sub>  
 分子量 : 192.2

49210-12	SOLVI	DIM0126C50	99%	50 g	49,000
----------	-------	------------	-----	------	--------

### 1,3-Dimethylimidazolium dimethylphosphate

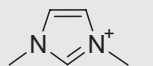


CAS RN<sup>®</sup> : 654058-04-5  
 分子式 : C<sub>7</sub>H<sub>15</sub>N<sub>2</sub>O<sub>4</sub>P  
 分子量 : 222.2

232 cP (25 °C)    d 1.25 (30 °C)    2.86 mS/cm (30 °C)

49514-00	ILT	IL-0053-HP	> 98%	25 g	28,000
49514-01	ILT	IL-0053-HP	> 98%	100 g	55,000
49507-70	M	4.90293.0025	≥ 98%	25 g	8,500
49507-71	M	4.90293.0100	≥ 98%	100 g	25,200

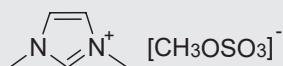
### 1,3-Dimethylimidazolium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 17899-81-1  
 分子式 : C<sub>7</sub>H<sub>9</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 377.3

49528-30	ILT	IL-0198-HP	99%	25 g	25,000
----------	-----	------------	-----	------	--------

### 1,3-Dimethylimidazolium methylsulfate

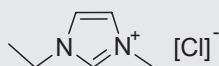


CAS RN<sup>®</sup> : 97345-90-9  
 分子式 : C<sub>6</sub>H<sub>12</sub>N<sub>2</sub>O<sub>4</sub>S  
 分子量 : 208.2

70 cP (25 °C)    d 1.32 (26 °C)    4.02 mS/cm (30 °C)

49518-89	ILT	IL-0243-HP	98%	25 g	18,000
49518-90	ILT	IL-0243-HP	98%	100 g	37,000

### 1-Ethyl-3-methylimidazolium chloride

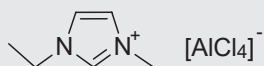


CAS RN<sup>®</sup> : 65039-09-0  
 分子式 : C<sub>6</sub>H<sub>11</sub>ClN<sub>2</sub>  
 分子量 : 146.6

87 °C

35408-2A	ACR	35408-0050		5 g	4,400
35408-1A	ACR	35408-0250		25 g	11,700
49514-08	ILT	IL-0093-HP	> 98%	25 g	22,000
49514-09	ILT	IL-0093-HP	> 98%	100 g	39,000
49528-13	ILT	IL-0093-UP	> 99%	25 g	34,000

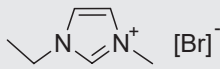
### 1-Ethyl-3-methylimidazolium chloride and Aluminum chloride (1:1.5)



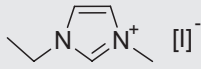
49527-67	ILT	EP-0001-HP	> 98%	25 g	20,000
49527-68	ILT	EP-0001-HP	> 98%	100 g	37,000

# Imidazolium based ionic liquids

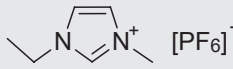
## 1-Ethyl-3-methylimidazolium bromide

	CAS RN® : 65039-08-9	14609-53			5 g	7,500	
	分子式 : C <sub>6</sub> H <sub>11</sub> BrN <sub>2</sub> 分子量 : 191.1	14609-33			25 g	23,000	
91 °C		35667-2A	ACR	35667-0050	5 g	3,800	
		35667-1A	ACR	35667-0250	25 g	10,100	
		49514-06	ILT	IL-0015-HP	99%	25 g	18,000
		49514-07	ILT	IL-0015-HP	99%	100 g	32,000

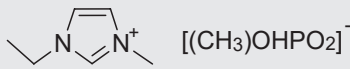
## 1-Ethyl-3-methylimidazolium iodide

	CAS RN® : 35935-34-3	14669-35			25 g	24,000	
	分子式 : C <sub>6</sub> H <sub>11</sub> IN <sub>2</sub> 分子量 : 238.1	14669-25			100 g	55,000	
80-85 °C		49514-20	ILT	IL-0048-HP	> 98%	25 g	27,000
		49514-21	ILT	IL-0048-HP	> 98%	100 g	56,000

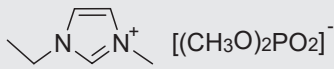
## 1-Ethyl-3-methylimidazolium hexafluorophosphate

	CAS RN® : 155371-19-0	14643-53			5 g	8,000	
	分子式 : C <sub>6</sub> H <sub>11</sub> F <sub>6</sub> N <sub>2</sub> P 分子量 : 256.1	14643-33			25 g	24,000	
		49514-16	ILT	IL-0048-HP	99%	25 g	22,000
		49514-17	ILT	IL-0048-HP	99%	100 g	43,000

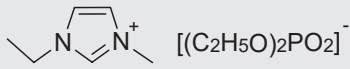
## 1-Ethyl-3-methylimidazolium methylphosphonate

	CAS RN® : 1137959-66-0	14670-35			25 mL	26,000
	分子式 : C <sub>7</sub> H <sub>15</sub> N <sub>2</sub> O <sub>3</sub> P 分子量 : 206.2	14670-25			100 mL	58,000
d 1.19						

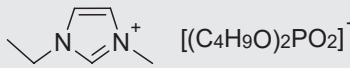
## 1-Ethyl-3-methylimidazolium dimethylphosphate

	CAS RN® : 945611-27-8	49518-37	ILT	IL-0220-HP	98%	25 g	31,000
	分子式 : C <sub>8</sub> H <sub>17</sub> N <sub>2</sub> O <sub>4</sub> P 分子量 : 236.2	49518-38	ILT	IL-0220-HP	98%	100 g	74,000
23 °C	d 1.22 (22 °C)	1.86 mS/cm (30 °C)					

## 1-Ethyl-3-methylimidazolium diethylphosphate

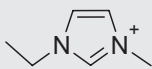
	CAS RN® : 848641-69-0	49514-12	ILT	IL-0052-HP	> 98%	25 g	17,000
	分子式 : C <sub>10</sub> H <sub>21</sub> N <sub>2</sub> O <sub>4</sub> P 分子量 : 264.3	49514-13	ILT	IL-0052-HP	> 98%	100 g	40,000
		49507-73	M	4.90294.0100	≥ 98%	100 g	37,200
0.64 mS/cm							

## 1-Ethyl-3-methylimidazolium dibutylphosphate

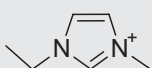
	CAS RN® : 869858-84-4	49529-12	ILT	IL-0323-HP	97%	25 g	50,000
	分子式 : C <sub>14</sub> H <sub>29</sub> N <sub>2</sub> O <sub>4</sub> P 分子量 : 320.4						

# Imidazolium based ionic liquids

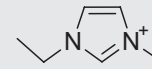
## 1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide

	CAS RN <sup>®</sup> : 235789-75-0	14697-35	25 mL	32,000
	分子式 : C <sub>6</sub> H <sub>11</sub> F <sub>2</sub> N <sub>3</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 291.3			
-14 °C      20 cP (23 °C)      d 1.45				

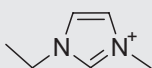
## 1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide

	CAS RN <sup>®</sup> : 174899-82-2	49514-04	ILT	IL-0023-HP	99%	25 g	17,000
	分子式 : C <sub>8</sub> H <sub>11</sub> F <sub>6</sub> N <sub>3</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 391.3	49514-05	ILT	IL-0023-HP	99%	100 g	39,000
-3 °C      32 cP (25 °C)      d 1.52 (20 °C)      6.63 mS/cm (20 °C)		49517-96	ILT	IL-0023-UP	99.5%	25 g	27,000
		49517-97	ILT	IL-0023-UP	99.5%	100 g	62,000
		49507-20	M	4.90189.0025	≥ 98%	25 g	19,200
		49507-21	M	4.90189.0100	≥ 98%	100 g	42,500

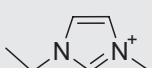
## 1-Ethyl-3-methylimidazolium bis(perfluoroethylsulfonyl)imide

	CAS RN <sup>®</sup> : 216299-76-2	49520-28	ILT	IL-0320-HP	> 98%	1 g	36,000
	分子式 : C <sub>10</sub> H <sub>11</sub> F <sub>10</sub> N <sub>3</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 491.3	49520-30	ILT	IL-0320-HP	> 98%	5 g	120,000

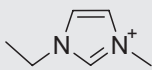
## 1-Ethyl-3-methylimidazolium tetrafluoroborate

	CAS RN <sup>®</sup> : 143314-16-3	14644-53				5 mL	11,000
	分子式 : C <sub>6</sub> H <sub>11</sub> N <sub>2</sub> BF <sub>4</sub> 分子量 : 198.0	14644-33				25 mL	30,000
15 °C      34 cP (25 °C)      d 1.28 (24 °C)      14.1 mS/cm (25 °C)		49514-28	ILT	IL-0006-HP	> 98%	25 g	29,000
		49514-30	ILT	IL-0006-HP	> 98%	100 g	51,000
		49527-90	ILT	IL-0006-UP	99%	25 g	43,000

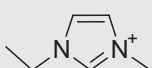
## 1-Ethyl-3-methylimidazolium hydrogensulfate

	CAS RN <sup>®</sup> : 412009-61-1	49514-18	ILT	IL-0091-HP	98%	25 g	21,000
	分子式 : C <sub>6</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S 分子量 : 208.2	49514-19	ILT	IL-0091-HP	98%	100 g	38,000
1510 cP (25 °C)      d 1.36 (28 °C)      0.50 mS/cm (20 °C)							

## 1-Ethyl-3-methylimidazolium methanesulfonate

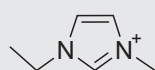
	CAS RN <sup>®</sup> : 145022-45-3	49514-22	ILT	IL-0004-HP	99%	25 g	26,000
	分子式 : C <sub>7</sub> H <sub>14</sub> N <sub>2</sub> O <sub>3</sub> S 分子量 : 206.3	49514-23	ILT	IL-0004-HP	99%	100 g	65,000
135 cP (25 °C)      d 1.24 (23 °C)      3.69 mS/cm (30 °C)							

## 1-Ethyl-3-methylimidazolium triflate

	CAS RN <sup>®</sup> : 145022-44-2	49514-35	ILT	IL-0009-HP	99%	25 g	17,000
	分子式 : C <sub>7</sub> H <sub>11</sub> F <sub>3</sub> N <sub>2</sub> O <sub>3</sub> S 分子量 : 260.2	49514-36	ILT	IL-0009-HP	99%	100 g	47,000
-9 °C      40 cP (25 °C)      d 1.39 (25 °C)      9.84 mS/cm (30 °C)		49504-01	M	4.90061.0025	≥ 98%	25 g	14,100
		49504-02	M	4.90061.0100	≥ 98%	100 g	42,500

# Imidazolium based ionic liquids

## 1-Ethyl-3-methylimidazolium methylsulfate

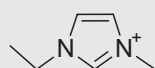


CAS RN<sup>®</sup> : 516474-01-4  
分子式 : C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>S  
分子量 : 222.3

64 cP (25 °C)    d 1.28 (26 °C)

49514-24	ILT	IL-0112-HP	98%	25 g	20,000
49514-25	ILT	IL-0112-HP	98%	100 g	45,000

## 1-Ethyl-3-methylimidazolium ethylsulfate

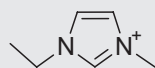


CAS RN<sup>®</sup> : 342573-75-5  
分子式 : C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>S  
分子量 : 236.3

94 cP (25 °C)    d 1.24 (24 °C)    5.56 mS/cm (30 °C)

49514-14	ILT	IL-0033-HP	98%	25 g	10,000
49514-15	ILT	IL-0033-HP	98%	100 g	22,000

## 1-Ethyl-3-methylimidazolium octylsulfate

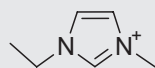


CAS RN<sup>®</sup> : 790663-79-5  
分子式 : C<sub>14</sub>H<sub>28</sub>N<sub>2</sub>O<sub>4</sub>S  
分子量 : 320.5

-9 °C    d 1.10 (20 °C)

49506-90	M	4.90205.0025	≥ 98%	25 g	18,800
49506-91	M	4.90205.0100	≥ 98%	100 g	56,500

## 1-Ethyl-3-methylimidazolium thiocyanate

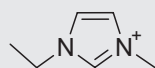


CAS RN<sup>®</sup> : 331717-63-6  
分子式 : C<sub>7</sub>H<sub>11</sub>N<sub>3</sub>S  
分子量 : 169.3

-6 °C    25 cP (20 °C)    d 1.12 (25 °C)    17.9 mS/cm (20 °C)

49514-31	ILT	IL-0007-HP	> 98%	25 g	16,000
49514-32	ILT	IL-0007-HP	> 98%	100 g	29,000
49506-50	M	4.90201.0025	≥ 98%	25 g	18,600
49506-51	M	4.90201.0100	≥ 98%	100 g	55,900

## 1-Ethyl-3-methylimidazolium dicyanamide

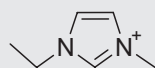


CAS RN<sup>®</sup> : 370865-89-7  
分子式 : C<sub>8</sub>H<sub>11</sub>N<sub>5</sub>  
分子量 : 177.2

-21 °C    15 cP (25 °C)    d 1.10 (26 °C)    17.7 mS/cm (30 °C)

49514-10	ILT	IL-0003-HP	> 98%	25 g	20,000
49514-11	ILT	IL-0003-HP	> 98%	100 g	41,000
49527-87	ILT	IL-0003-UP	> 99%	25 g	104,000
49503-89	M	4.90163.0025	≥ 98%	25 g	18,900
49503-90	M	4.90163.0100	≥ 98%	100 g	47,500

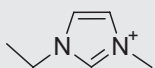
## 1-Ethyl-3-methylimidazolium tricyanomethanide



CAS RN<sup>®</sup> : 666823-18-3  
分子式 : C<sub>10</sub>H<sub>11</sub>N<sub>5</sub>  
分子量 : 201.2

49527-43	ILT	IL-0316-HP	98%	25 g	33,000
49527-44	ILT	IL-0316-HP	98%	100 g	85,000

## 1-Ethyl-3-methylimidazolium acetate

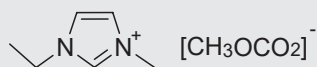


CAS RN<sup>®</sup> : 143314-17-4  
分子式 : C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>  
分子量 : 170.2

49514-02	ILT	IL-0189-TG	95%	25 g	25,000
49514-03	ILT	IL-0189-TG	95%	100 g	45,000

# Imidazolium based ionic liquids

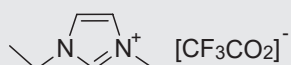
## 1-Ethyl-3-methylimidazolium methylcarbonate, 30% in methanol



CAS RN® : 251102-26-7  
 分子式 : C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub>  
 分子量 : 186.1

49529-26    ILT    IN-0027-SG    > 97%    25 g    6,000

## 1-Ethyl-3-methylimidazolium trifluoroacetate

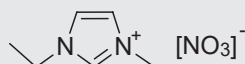


CAS RN® : 174899-65-1  
 分子式 : C<sub>8</sub>H<sub>11</sub>N<sub>2</sub>F<sub>3</sub>O<sub>2</sub>  
 分子量 : 224.2

49518-02    ILT    IL-0027-SG    > 97%    25 g    27,000

49518-03    ILT    IL-0027-SG    > 97%    100 g    61,000

## 1-Ethyl-3-methylimidazolium nitrate



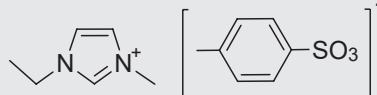
CAS RN® : 143314-14-1  
 分子式 : C<sub>6</sub>H<sub>11</sub>N<sub>3</sub>O<sub>3</sub>  
 分子量 : 173.2

49517-94    ILT    IL-0005-HP    > 98%    25 g    51,000

49517-95    ILT    IL-0005-HP    > 98%    100 g    130,000

38 °C                  21 cP (45 °C)

## 1-Ethyl-3-methylimidazolium tosylate



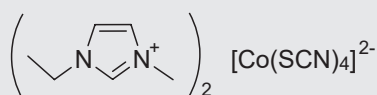
CAS RN® : 328090-25-1  
 分子式 : C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>S  
 分子量 : 282.4

49514-33    ILT    IL-0008-HP    99%    25 g    17,000

49514-34    ILT    IL-0008-HP    99%    100 g    41,000

54 °C                  5214 cP (20 °C)    d 1.23                  0.19 mS/cm (20 °C)

## Bis(1-ethyl-3-methylimidazolium) tetrathiocyanatocobaltate

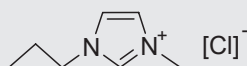


CAS RN® : 1255925-80-4  
 分子式 : C<sub>16</sub>H<sub>22</sub>CoN<sub>8</sub>S<sub>4</sub>  
 分子量 : 513.6

49520-10    ILT    IL-0309-HP    99%    25 g    31,000

49520-11    ILT    IL-0309-HP    99%    100 g    61,000

## 1-Methyl-3-propylimidazolium chloride



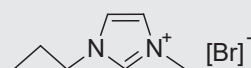
CAS RN® : 79917-89-8  
 分子式 : C<sub>7</sub>H<sub>13</sub>ClN<sub>2</sub>  
 分子量 : 160.6

49514-41    ILT    IL-0144-HP    > 98%    25 g    24,000

49514-42    ILT    IL-0144-HP    > 98%    100 g    51,000

60 °C

## 1-Methyl-3-propylimidazolium bromide



CAS RN® : 85100-76-1  
 分子式 : C<sub>7</sub>H<sub>13</sub>BrN<sub>2</sub>  
 分子量 : 205.1

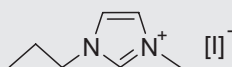
49514-39    ILT    IL-0096-HP    99%    25 g    21,000

49514-40    ILT    IL-0096-HP    99%    100 g    44,000

28 °C                  11150 cP (18 °C)

# Imidazolium based ionic liquids

## 1-Methyl-3-propylimidazolium iodide

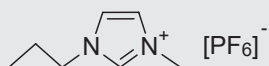


CAS RN<sup>®</sup> : 119171-18-5  
 分子式 : C<sub>7</sub>H<sub>13</sub>N<sub>2</sub>  
 分子量 : 252.1

935 cP (25 °C)    d 1.54 (24 °C)    0.96 mS/cm (30 °C)

32520-35				25 mL	20,000
32520-25				100 mL	42,000
49514-45	ILT	IL-0025-HP	> 98%	25 g	16,000
49514-46	ILT	IL-0025-HP	> 98%	100 g	33,000

## 1-Methyl-3-propylimidazolium hexafluorophosphate

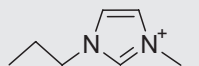


CAS RN<sup>®</sup> : 216300-12-8  
 分子式 : C<sub>7</sub>H<sub>13</sub>F<sub>6</sub>N<sub>2</sub>P  
 分子量 : 270.2

41 °C

49514-43	ILT	IL-0142-HP	99%	25 g	25,000
49514-44	ILT	IL-0142-HP	99%	100 g	51,000

## 1-Methyl-3-propylimidazolium bis(trifluoromethylsulfonyl)imide

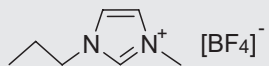


CAS RN<sup>®</sup> : 216299-72-8  
 分子式 : C<sub>9</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 405.3

44 cP (25 °C)    d 1.48 (18 °C)    4.40 mS/cm (20 °C)

49514-37	ILT	IL-0024-HP	99%	25 g	24,000
49514-38	ILT	IL-0024-HP	99%	100 g	55,000
49527-97	ILT	IL-0024-UP	99.50%	25 g	35,000

## 1-Methyl-3-propylimidazolium tetrafluoroborate

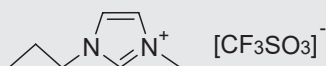


CAS RN<sup>®</sup> : 244193-48-4  
 分子式 : C<sub>7</sub>H<sub>13</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 212.0

74 cP (25 °C)    d 1.27 (20 °C)

49514-47	ILT	IL-0143-HP	> 98%	25 g	22,000
49514-48	ILT	IL-0143-HP	> 98%	100 g	43,000

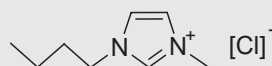
## 1-Propyl-3-methylimidazolium trifluoromethanesulfonate



CAS RN<sup>®</sup> : 878550-45-9  
 分子式 : C<sub>8</sub>H<sub>13</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S  
 分子量 : 274.3

49528-90	ILT	IL-0296-HP	99%	25 g	41,000
----------	-----	------------	-----	------	--------

## 1-Butyl-3-methylimidazolium chloride

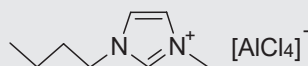


CAS RN<sup>®</sup> : 79917-90-1  
 分子式 : C<sub>8</sub>H<sub>15</sub>ClN<sub>2</sub>  
 分子量 : 174.7

65 °C

05068-53				5 g	7,000
05068-33				25 g	17,000
35409-2A	ACR	35409-0050		5 g	9,300
35409-1A	ACR	35409-0250		25 g	10,200
49514-53	ILT	IL-0014-HP	99%	25 g	13,000
49514-54	ILT	IL-0014-HP	99%	100 g	24,000

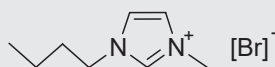
## 1-Butyl-3-methylimidazolium chloride and Aluminum chloride (1:1.5)



49527-69	ILT	EP-0002-HP	98%	25 g	15,000
49527-70	ILT	EP-0002-HP	98%	100 g	28,000

# Imidazolium based ionic liquids

## 1-Butyl-3-methylimidazolium bromide

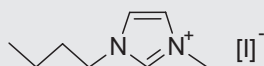


CAS RN® : 85100-77-2  
分子式 : C<sub>8</sub>H<sub>15</sub>BrN<sub>2</sub>  
分子量 : 219.1

81 °C

49514-51	ILT	IL-0037-HP	99%	25 g	16,000
49514-52	ILT	IL-0037-HP	99%	100 g	28,000
49503-09	M	4.90087.0025	≥ 98%	25 g	8,900
49503-10	M	4.90087.0100	≥ 98%	100 g	18,100

## 1-Butyl-3-methylimidazolium iodide

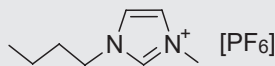


CAS RN® : 65039-05-6  
分子式 : C<sub>8</sub>H<sub>15</sub>IN<sub>2</sub>  
分子量 : 266.1

1183 cP (25 °C)    d 1.48 (25 °C)    0.52 mS/cm (25 °C)

04235-35				25 mL	25,000
04235-25				100 mL	50,000
49514-61	ILT	IL-0051-HP	> 98%	25 g	25,000
49514-62	ILT	IL-0051-HP	> 98%	100 g	54,000

## 1-Butyl-3-methylimidazolium hexafluorophosphate

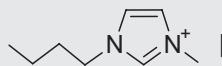


CAS RN® : 174501-64-5  
分子式 : C<sub>8</sub>H<sub>15</sub>N<sub>2</sub>PF<sub>6</sub>  
分子量 : 284.2

-8 °C    267 cP (25 °C)    d 1.37 (23 °C)    1.37 mS/cm (20 °C)

05064-53				5 mL	6,500
05064-33				25 mL	19,000
49514-57	ILT	IL-0011-HP	99%	25 g	11,000
49514-58	ILT	IL-0011-HP	99%	100 g	26,000
49527-92	ILT	IL-0011-UP	99.5%	25 g	16,000

## 1-Butyl-3-methylimidazolium dimethylphosphate

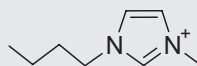


CAS RN® : 891772-94-4  
分子式 : C<sub>10</sub>H<sub>21</sub>N<sub>2</sub>O<sub>4</sub>P  
分子量 : 264.3

534 cP (25 °C)    d 1.16 (20 °C)    0.56 mS/cm (30 °C)

49519-19	ILT	IL-0257-HP	> 98%	25 g	49,000
49519-20	ILT	IL-0257-HP	> 98%	100 g	88,000

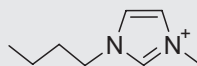
## 1-Butyl-3-methylimidazolium dibutylphosphate



CAS RN® : 663199-28-8  
分子式 : C<sub>16</sub>H<sub>33</sub>N<sub>2</sub>O<sub>4</sub>P  
分子量 : 348.4

49529-13	ILT	IL-0324-HP	97%	25 g	56,000
----------	-----	------------	-----	------	--------

## 1-Butyl-3-methylimidazolium bis(fluorosulfonyl)imide

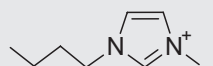


CAS RN® : 1235234-58-8  
分子式 : C<sub>8</sub>H<sub>15</sub>F<sub>2</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 319.4

< -50 °C    33 cP (24 °C)    d 1.36 (19 °C)

05816-35				25 mL	32,000
----------	--	--	--	-------	--------

## 1-Butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide



CAS RN® : 174899-83-3  
分子式 : C<sub>10</sub>H<sub>15</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 419.4

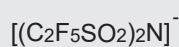
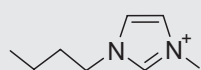
-4 °C    49 cP (25 °C)    d 1.44 (19 °C)    3.41 mS/cm (25 °C)

05063-53				5 mL	9,000
05063-33				25 mL	30,500
49514-49	ILT	IL-0029-HP	99%	25 g	17,000
49514-50	ILT	IL-0029-HP	99%	100 g	36,000
49528-02	ILT	IL-0029-UP	99.5%	25 g	35,000



# Imidazolium based ionic liquids

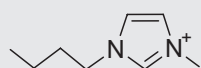
## 1-Butyl-3-methylimidazolium bis(perfluoroethylsulfonyl)imide



CAS RN<sup>®</sup> : 254731-29-8  
 分子式 : C<sub>12</sub>H<sub>15</sub>F<sub>10</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 519.4

49520-31	ILT	IL-0321-HP	> 98%	1 g	36,000
49520-32	ILT	IL-0321-HP	> 98%	5 g	120,000

## 1-Butyl-3-methylimidazolium tetrafluoroborate

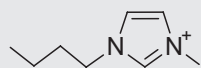


CAS RN<sup>®</sup> : 174501-65-6  
 分子式 : C<sub>8</sub>H<sub>15</sub>N<sub>2</sub>BF<sub>4</sub>  
 分子量 : 226.0

-97 °C (T<sub>g</sub>)    104 cP (25 °C)    d 1.21 (22 °C)    3.15 mS/cm (20 °C)

05065-53				5 mL	7,500
05065-33				25 mL	22,000
49514-65	ILT	IL-0012-HP	99%	25 g	11,000
49514-66	ILT	IL-0012-HP	99%	100 g	26,000
35421-1A	ACR	35421-0050		5 g	8,800

## 1-Butyl-3-methylimidazolium hydrogensulfate

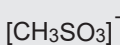
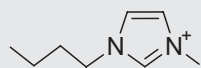


CAS RN<sup>®</sup> : 262297-13-2  
 分子式 : C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>S  
 分子量 : 236.3

3088 cP (25 °C)    d 1.28 (30 °C)

49514-59	ILT	IL-0060-HP	98%	25 g	23,000
49514-60	ILT	IL-0060-HP	98%	100 g	48,000

## 1-Butyl-3-methylimidazolium methanesulfonate

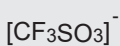
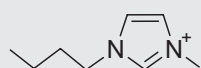


CAS RN<sup>®</sup> : 342789-81-5  
 分子式 : C<sub>9</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>S  
 分子量 : 234.3

73 °C

49514-63	ILT	IL-0061-HP	98%	25 g	23,000
49514-64	ILT	IL-0061-HP	98%	100 g	42,000

## 1-Butyl-3-methylimidazolium triflate

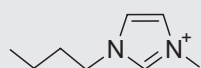


CAS RN<sup>®</sup> : 174899-66-2  
 分子式 : C<sub>9</sub>H<sub>15</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S  
 分子量 : 288.3

16 °C    80 cP (25 °C)    d 1.30 (24 °C)    3.05 mS/cm (20 °C)

49514-69	ILT	IL-0013-HP	99%	25 g	21,000
49514-70	ILT	IL-0013-HP	99%	100 g	43,000
49503-30	M	4.90024.0025	≥ 98%	25 g	14,100
49503-31	M	4.90024.0100	≥ 98%	100 g	42,500
49503-32	M	4.91024.0025	≥ 99%	25 g	20,000
49503-33	M	4.91024.0100	≥ 99%	100 g	59,600

## 1-Butyl-3-methylimidazolium thiocyanate

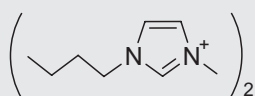


CAS RN<sup>®</sup> : 344790-87-0  
 分子式 : C<sub>9</sub>H<sub>15</sub>N<sub>3</sub>S  
 分子量 : 197.3

36 cP (25 °C)    d 1.07 (30 °C)    8.98 mS/cm (30 °C)

49514-67	ILT	IL-0063-HP	> 98%	25 g	15,000
49514-68	ILT	IL-0063-HP	> 98%	100 g	27,000

## Bis(1-butyl-3-methylimidazolium) tetrathiocyanatocobaltate

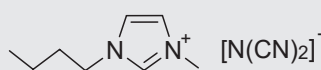


CAS RN<sup>®</sup> : 1245942-47-5  
 分子式 : C<sub>20</sub>H<sub>30</sub>CoN<sub>8</sub>S<sub>4</sub>  
 分子量 : 569.7

49520-12	ILT	IL-0310-HP	> 99%	25 g	31,000
49520-13	ILT	IL-0310-HP	> 99%	100 g	61,000

# Imidazolium based ionic liquids

## 1-Butyl-3-methylimidazolium dicyanamide

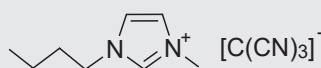


CAS RN<sup>®</sup> : 448245-52-1  
 分子式 : C<sub>10</sub>H<sub>15</sub>N<sub>5</sub>  
 分子量 : 205.3

28 cP (25 °C)    d 1.06 (30 °C)    9.53 mS/cm (20 °C)

49514-55	ILT	IL-0010-HP	> 98%	25 g	27,000
49514-56	ILT	IL-0010-HP	> 98%	100 g	60,000
49503-13	M	4.90015.0025	≥ 98%	25 g	13,000

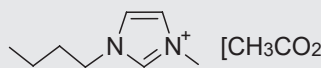
## 1-Butyl-3-methylimidazolium tricyanomethanide



CAS RN<sup>®</sup> : 878027-73-7  
 分子式 : C<sub>12</sub>H<sub>15</sub>N<sub>5</sub>  
 分子量 : 229.3

49527-45	ILT	IL-0317-HP	98%	25 g	27,000
49527-46	ILT	IL-0317-HP	98%	100 g	49,000

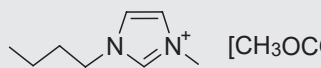
## 1-Butyl-3-methylimidazolium acetate



CAS RN<sup>®</sup> : 284049-75-8  
 分子式 : C<sub>10</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>  
 分子量 : 198.3

49520-22	ILT	IL-0315-HP	> 98%	25 g	19,000
49520-23	ILT	IL-0315-HP	> 98%	100 g	58,000

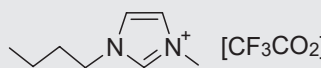
## 1-Butyl-3-methylimidazolium methylcarbonate, 30% in methanol



CAS RN<sup>®</sup> : 916850-37-8  
 分子式 : C<sub>10</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>  
 分子量 : 214.1

49529-27	ILT	IN-0028-SG	> 97%	25 g	7,000
----------	-----	------------	-------	------	-------

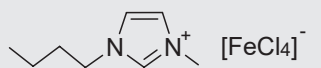
## 1-Butyl-3-methylimidazolium trifluoroacetate



CAS RN<sup>®</sup> : 174899-94-6  
 分子式 : C<sub>10</sub>H<sub>15</sub>F<sub>3</sub>N<sub>2</sub>O<sub>2</sub>  
 分子量 : 252.2

49519-25	ILT	IL-0260-SG	> 97%	25 g	27,000
49519-26	ILT	IL-0260-SG	> 97%	100 g	61,000

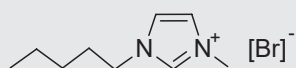
## 1-Butyl-3-methylimidazolium tetrachloroferrate(III)



CAS RN<sup>®</sup> : 359845-21-9  
 分子式 : C<sub>8</sub>H<sub>15</sub>Cl<sub>4</sub>FeN<sub>2</sub>  
 分子量 : 336.9

49518-10	ILT	IL-0047-SG	> 97%	25 g	15,000
49518-11	ILT	IL-0047-SG	> 97%	100 g	24,000

## 1-Methyl-3-pentylimidazolium bromide

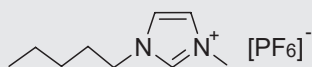


CAS RN<sup>®</sup> : 343851-31-0  
 分子式 : C<sub>9</sub>H<sub>17</sub>BrN<sub>2</sub>  
 分子量 : 233.1

49519-84	ILT	IL-0297-HP	99%	25 g	34,000
49519-85	ILT	IL-0297-HP	99%	100 g	72,000

# Imidazolium based ionic liquids

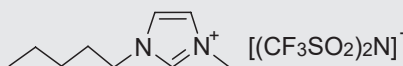
## 1-Methyl-3-pentylimidazolium hexafluorophosphate



CAS RN® : 280779-52-4  
 分子式 : C<sub>9</sub>H<sub>17</sub>F<sub>6</sub>N<sub>2</sub>P  
 分子量 : 298.2

49520-04	ILT	IL-0306-HP	> 99%	25 g	32,000
49520-05	ILT	IL-0306-HP	> 99%	100 g	64,000

## 1-Methyl-3-pentylimidazolium bis(trifluoromethylsulfonyl)imide



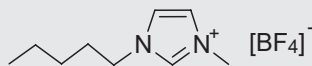
CAS RN® : 280779-53-5  
 分子式 : C<sub>11</sub>H<sub>17</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 433.4

59 cP (25 °C)

3.28 mS/cm (30 °C)

49519-90	ILT	IL-0300-HP	> 99%	25 g	48,000
49519-91	ILT	IL-0300-HP	> 99%	100 g	109,000

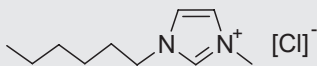
## 1-Methyl-3-pentylimidazolium tetrafluoroborate



CAS RN® : 244193-49-5  
 分子式 : C<sub>9</sub>H<sub>17</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 240.1

49519-96	ILT	IL-0303-HP	> 99%	25 g	45,000
49519-97	ILT	IL-0303-HP	> 99%	100 g	90,000

## 1-Hexyl-3-methylimidazolium chloride



CAS RN® : 171058-17-6  
 分子式 : C<sub>10</sub>H<sub>19</sub>ClN<sub>2</sub>  
 分子量 : 202.7

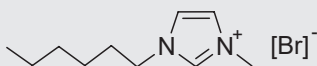
3302 cP (35 °C)

d 1.04 (26 °C)

0.076 mS/cm (30 °C)

49514-75	ILT	IL-0054-HP	> 98%	25 g	29,000
49514-76	ILT	IL-0054-HP	> 98%	100 g	53,000

## 1-Hexyl-3-methylimidazolium bromide



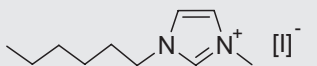
CAS RN® : 85100-78-3  
 分子式 : C<sub>10</sub>H<sub>19</sub>BrN<sub>2</sub>  
 分子量 : 247.2

3822 cP (25 °C)

0.037 mS/cm

49514-73	ILT	IL-0069-HP	99%	25 g	29,000
49514-74	ILT	IL-0069-HP	99%	100 g	51,000

## 1-Hexyl-3-methylimidazolium iodide



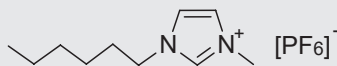
CAS RN® : 178631-05-5  
 分子式 : C<sub>10</sub>H<sub>19</sub>IN<sub>2</sub>  
 分子量 : 294.2

1730 cP (25 °C)

0.25 mS/cm (25 °C)

18010-35				25 mL	26,000
18010-25				100 mL	55,000
49514-79	ILT	IL-0026-HP	> 98%	25 g	29,000
49514-80	ILT	IL-0026-HP	> 98%	100 g	62,000

## 1-Hexyl-3-methylimidazolium hexafluorophosphate



CAS RN® : 304680-35-1  
 分子式 : C<sub>10</sub>H<sub>19</sub>N<sub>2</sub>PF<sub>6</sub>  
 分子量 : 312.2

465 cP (25 °C)

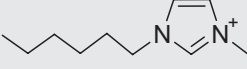
d 1.30 (23 °C)

0.80 mS/cm (30 °C)

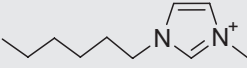
49514-77	ILT	IL-0018-HP	99%	25 g	16,000
49514-78	ILT	IL-0018-HP	99%	100 g	41,000
35418-1A	ACR	35418-0250		25 g	24,900

# Imidazolium based ionic liquids

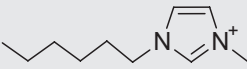
## 1-Hexyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate

 $[(C_2F_5)_3PF_3]^-$	CAS RN <sup>®</sup> : 713512-19-7	49504-35	M	4.91078.0025	≥ 99%	25 g	21,600
	分子式 : C <sub>16</sub> H <sub>19</sub> F <sub>18</sub> N <sub>2</sub> P 分子量 : 612.3	49504-36	M	4.91078.0100	≥ 99%	100 g	50,200
-14 °C	d 1.56 (20 °C)						

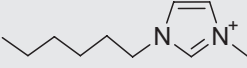
## 1-Hexyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide

 $[(CF_3SO_2)_2N]^-$	CAS RN <sup>®</sup> : 382150-50-7	49514-71	ILT	IL-0098-HP	99%	25 g	24,000
	分子式 : C <sub>12</sub> H <sub>19</sub> N <sub>3</sub> F <sub>6</sub> S <sub>2</sub> O <sub>4</sub> 分子量 : 447.4	49514-72	ILT	IL-0098-HP	99%	100 g	55,000
63 cP (25 °C)	d 1.37 (29 °C)	49528-15	ILT	IL-0098-UP	99.5%	25 g	34,000
	1.73 mS/cm (20 °C)	49504-25	M	4.90031.0025	≥ 99%	25 g	15,500
		49503-84	M	4.90031.0100	≥ 99%	100 g	38,100

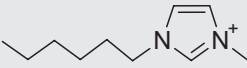
## 1-Hexyl-3-methylimidazolium tetrafluoroborate

 $[BF_4]^-$	CAS RN <sup>®</sup> : 244193-50-8	49514-81	ILT	IL-0019-HP	99%	25 g	17,000
	分子式 : C <sub>10</sub> H <sub>19</sub> N <sub>2</sub> BF <sub>4</sub> 分子量 : 254.1	49514-82	ILT	IL-0019-HP	99%	100 g	36,000
288 cP (20 °C)	d 1.15 (24 °C)						
	1.18 mS/cm (20 °C)						

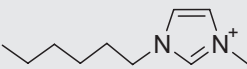
## 1-Hexyl-3-methylimidazolium triflate

 $[CF_3SO_3]^-$	CAS RN <sup>®</sup> : 460345-16-8	49514-83	ILT	IL-0070-HP	99%	25 g	36,000
	分子式 : C <sub>11</sub> H <sub>19</sub> F <sub>3</sub> N <sub>2</sub> O <sub>3</sub> S 分子量 : 316.3	49514-84	ILT	IL-0070-HP	99%	100 g	98,000
136 cP (25 °C)	d 1.24 (29 °C)						
	1.16 mS/cm (24 °C)						


## 1-Hexyl-3-methylimidazolium perfluorobutanesulfonate

 $[C_4F_9SO_3]^-$	CAS RN <sup>®</sup> : 1001557-05-6	49520-14	ILT	IL-0311-HP	> 99%	25 g	36,000
	分子式 : C <sub>14</sub> H <sub>19</sub> F <sub>9</sub> N <sub>2</sub> O <sub>3</sub> S 分子量 : 466.4	49520-15	ILT	IL-0311-HP	> 99%	100 g	71,000

## 1-Hexyl-3-methylimidazolium tricyanomethanide

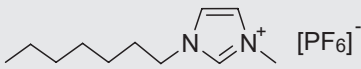
 $[C(CN)_3]^-$	CAS RN <sup>®</sup> : 1365535-17-6	49527-51	ILT	IL-0331-HP	98%	25 g	39,000
	分子式 : C <sub>14</sub> H <sub>19</sub> N <sub>5</sub> 分子量 : 257.3	49527-52	ILT	IL-0331-HP	98%	100 g	69,000

## 1-Heptyl-3-methylimidazolium bromide

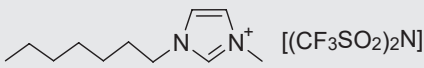
 $[Br]^-$	CAS RN <sup>®</sup> : 343851-32-1	49519-86	ILT	IL-0298-HP	99%	25 g	34,000
	分子式 : C <sub>11</sub> H <sub>21</sub> BrN <sub>2</sub> 分子量 : 261.2	49519-87	ILT	IL-0298-HP	99%	100 g	72,000
6680 cP (25 °C)							

# Imidazolium based ionic liquids

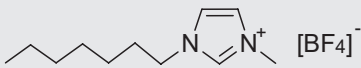
## 1-Heptyl-3-methylimidazolium hexafluorophosphate

 <p>CAS RN<sup>®</sup> : 357915-04-9 分子式 : C<sub>11</sub>H<sub>21</sub>F<sub>6</sub>N<sub>2</sub>P 分子量 : 326.3</p>	49520-06	ILT	IL-0307-HP	> 99%	25 g	32,000
	49520-07	ILT	IL-0307-HP	> 99%	100 g	64,000

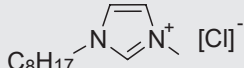
## 1-Heptyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide

 <p>CAS RN<sup>®</sup> : 425382-14-5 分子式 : C<sub>13</sub>H<sub>21</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub> 分子量 : 461.4</p>	49519-92	ILT	IL-0301-HP	> 99%	25 g	48,000
	49519-93	ILT	IL-0301-HP	> 99%	100 g	109,000

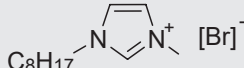
## 1-Heptyl-3-methylimidazolium tetrafluoroborate

 <p>CAS RN<sup>®</sup> : 244193-51-9 分子式 : C<sub>11</sub>H<sub>21</sub>BF<sub>4</sub>N<sub>2</sub> 分子量 : 268.1</p>	49520-00	ILT	IL-0304-HP	> 99%	25 g	41,000
	49520-01	ILT	IL-0304-HP	> 99%	100 g	83,000

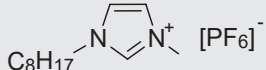
## 1-Methyl-3-octylimidazolium chloride

 <p>CAS RN<sup>®</sup> : 64697-40-1 分子式 : C<sub>12</sub>H<sub>23</sub>ClN<sub>2</sub> 分子量 : 230.8</p> <p>&lt; 25 °C      3690 cP (35 °C)      d 1.01 (24 °C)      0.091 mS/cm (30 °C)</p>	49514-89	ILT	IL-0072-HP	99%	25 g	24,000
	49514-90	ILT	IL-0072-HP	99%	100 g	55,000

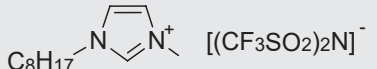
## 1-Methyl-3-octylimidazolium bromide

 <p>CAS RN<sup>®</sup> : 61545-99-1 分子式 : C<sub>12</sub>H<sub>23</sub>BrN<sub>2</sub> 分子量 : 275.2</p> <p>6604 cP (25 °C)      d 1.17 (24 °C)      0.063 mS/cm (30 °C)</p>	49514-87	ILT	IL-0071-HP	99%	25 g	33,000
	49514-88	ILT	IL-0071-HP	99%	100 g	58,000

## 1-Methyl-3-octylimidazolium hexafluorophosphate

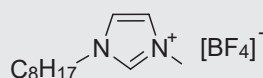
 <p>CAS RN<sup>®</sup> : 304680-36-2 分子式 : C<sub>12</sub>H<sub>23</sub>F<sub>6</sub>N<sub>2</sub>P 分子量 : 340.3</p> <p>608 cP (25 °C)      d 1.24 (24 °C)      0.44 mS/cm (30 °C)</p>	49514-91	ILT	IL-0020-HP	99%	25 g	24,000
	49514-92	ILT	IL-0020-HP	99%	100 g	51,000
	35676-2A	ACR	35676-0050		5 g	8,200
	35676-1A	ACR	35676-0250		25 g	29,700

## 1-Methyl-3-octylimidazolium bis(trifluoromethylsulfonyl)imide

 <p>CAS RN<sup>®</sup> : 178631-04-4 分子式 : C<sub>14</sub>H<sub>23</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub> 分子量 : 475.5</p> <p>87 cP (25 °C)      d 1.32 (25.5 °C)      1.00 mS/cm (20 °C)</p>	49514-85	ILT	IL-0099-HP	99%	25 g	29,000
	49514-86	ILT	IL-0099-HP	99%	100 g	67,000

# Imidazolium based ionic liquids

## 1-Methyl-3-octylimidazolium tetrafluoroborate

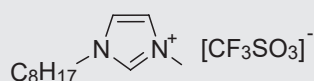


CAS RN<sup>®</sup> : 244193-52-0  
分子式 : C<sub>12</sub>H<sub>23</sub>BF<sub>4</sub>N<sub>2</sub><sup>+</sup>  
分子量 : 282.1

232 cP (25 °C)    d 1.11 (19 °C)    1.27 mS/cm (30 °C)

49514-93	ILT	IL-0021-HP	99%	25 g	17,000
49514-94	ILT	IL-0021-HP	99%	100 g	47,000

## 1-Methyl-3-octylimidazolium triflate

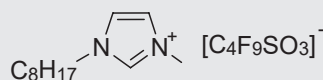


CAS RN<sup>®</sup> : 403842-84-2  
分子式 : C<sub>13</sub>H<sub>23</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S<sup>+</sup>  
分子量 : 344.4

-20 °C    226 cP (25 °C)    d 1.20 (25 °C)    0.58 mS/cm (24 °C)

49514-95	ILT	IL-0073-HP	99%	25 g	40,000
49514-96	ILT	IL-0073-HP	99%	100 g	101,000

## 1-Methyl-3-octylimidazolium perfluorobutanesulfonate

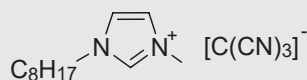


CAS RN<sup>®</sup> : 905972-83-0  
分子式 : C<sub>16</sub>H<sub>23</sub>F<sub>9</sub>N<sub>2</sub>O<sub>3</sub>S<sup>+</sup>  
分子量 : 494.4

-20 °C    226 cP (25 °C)    d 1.20 (25 °C)    0.58 mS/cm (24 °C)

49520-16	ILT	IL-0312-HP	> 99%	25 g	41,000
49520-17	ILT	IL-0312-HP	> 99%	100 g	82,000

## 1-Methyl-3-octylimidazolium tricyanomethanide

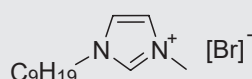


CAS RN<sup>®</sup> : 178631-03-3  
分子式 : C<sub>16</sub>H<sub>23</sub>N<sub>5</sub><sup>+</sup>  
分子量 : 285.4

-20 °C    226 cP (25 °C)    d 1.20 (25 °C)    0.58 mS/cm (24 °C)

49527-53	ILT	IL-0332-HP	98%	25 g	49,000
49527-54	ILT	IL-0332-HP	98%	100 g	87,000

## 1-Methyl-3-nonylimidazolium bromide

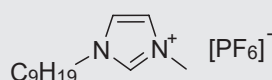


CAS RN<sup>®</sup> : 343851-34-3  
分子式 : C<sub>13</sub>H<sub>25</sub>BrN<sub>2</sub><sup>+</sup>  
分子量 : 289.3

-20 °C    226 cP (25 °C)    d 1.20 (25 °C)    0.58 mS/cm (24 °C)

49519-88	ILT	IL-0299-HP	> 99%	25 g	64,000
49519-89	ILT	IL-0299-HP	> 99%	100 g	136,000

## 1-Methyl-3-nonylimidazolium hexafluorophosphate

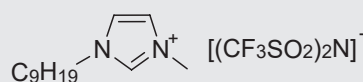


CAS RN<sup>®</sup> : 343952-29-4  
分子式 : C<sub>13</sub>H<sub>25</sub>F<sub>6</sub>N<sub>2</sub>P<sup>+</sup>  
分子量 : 354.3

-20 °C    226 cP (25 °C)    d 1.20 (25 °C)    0.58 mS/cm (24 °C)

49520-08	ILT	IL-0308-HP	> 99%	25 g	71,000
49520-09	ILT	IL-0308-HP	> 99%	100 g	141,000

## 1-Methyl-3-nonylimidazolium bis(trifluoromethylsulfonyl)imide



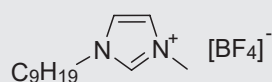
CAS RN<sup>®</sup> : 433337-21-4  
分子式 : C<sub>15</sub>H<sub>25</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub><sup>+</sup>  
分子量 : 489.5

-20 °C    226 cP (25 °C)    d 1.20 (25 °C)    0.58 mS/cm (24 °C)

49519-94	ILT	IL-0302-HP	> 99%	25 g	81,000
49519-95	ILT	IL-0302-HP	> 99%	100 g	182,000

# Imidazolium based ionic liquids

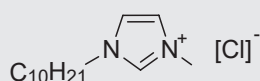
## 1-Methyl-3-nonylimidazolium tetrafluoroborate



CAS RN® : 244193-55-3  
 分子式 : C<sub>13</sub>H<sub>25</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 296.2

49520-02	ILT	IL-0305-HP	> 99%	25 g	77,000
49520-03	ILT	IL-0305-HP	> 99%	100 g	154,000

## 1-Decyl-3-methylimidazolium chloride

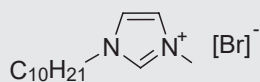


CAS RN® : 171058-18-7  
 分子式 : C<sub>14</sub>H<sub>27</sub>ClN<sub>2</sub>  
 分子量 : 258.8

> 25 °C      8570 cP (35 °C)      d 0.99 (25 °C)      0.019 mS/cm (30 °C)

49515-03	ILT	IL-0065-HP	> 98%	25 g	29,000
49515-04	ILT	IL-0065-HP	> 98%	100 g	62,000

## 1-Decyl-3-methylimidazolium bromide

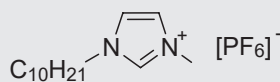


CAS RN® : 188589-32-4  
 分子式 : C<sub>14</sub>H<sub>27</sub>BrN<sub>2</sub>  
 分子量 : 303.3

18020 cP (18 °C)      d 1.13 (25 °C)      0.072 mS/cm (30 °C)

49515-01	ILT	IL-0064-HP	> 98%	25 g	27,000
49515-02	ILT	IL-0064-HP	> 98%	100 g	58,000

## 1-Decyl-3-methylimidazolium hexafluorophosphate

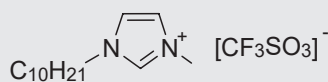


CAS RN® : 362043-46-7  
 分子式 : C<sub>14</sub>H<sub>27</sub>F<sub>6</sub>N<sub>2</sub>P  
 分子量 : 368.3

30-35 °C

49515-05	ILT	IL-0066-HP	> 98%	25 g	30,000
49515-06	ILT	IL-0066-HP	> 98%	100 g	60,000

## 1-Decyl-3-methylimidazolium triflate

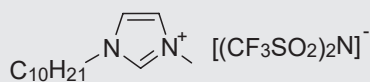


CAS RN® : 412009-62-2  
 分子式 : C<sub>15</sub>H<sub>27</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S  
 分子量 : 372.4

298 cP (25 °C)      d 1.15 (26 °C)      0.41 mS/cm (24 °C)

49515-09	ILT	IL-0068-HP	99%	25 g	48,000
49515-10	ILT	IL-0068-HP	99%	100 g	96,000

## 1-Decyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide

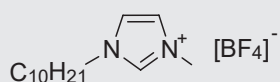


CAS RN® : 433337-23-6  
 分子式 : C<sub>16</sub>H<sub>27</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 503.5

113 cP (25 °C)      d 1.27 (30 °C)      0.76 mS/cm (24 °C)

49514-97	ILT	IL-0100-HP	> 98%	25 g	33,000
49515-00	ILT	IL-0100-HP	> 98%	100 g	77,000

## 1-Decyl-3-methylimidazolium tetrafluoroborate



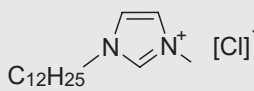
CAS RN® : 244193-56-4  
 分子式 : C<sub>14</sub>H<sub>27</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 310.2

-4 °C      721 cP (18 °C)      d 1.07 (20 °C)

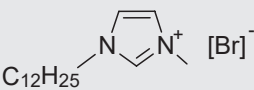
49515-07	ILT	IL-0067-HP	> 98%	25 g	31,000
49515-08	ILT	IL-0067-HP	> 98%	100 g	62,000

# Imidazolium based ionic liquids

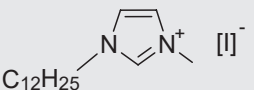
## 1-Dodecyl-3-methylimidazolium chloride

 <p>CAS RN<sup>®</sup> : 114569-84-5 分子式 : C<sub>16</sub>H<sub>31</sub>ClN<sub>2</sub> 分子量 : 286.9</p>	49515-15	ILT	IL-0120-HP	> 98%	25 g	43,000
	49515-16	ILT	IL-0120-HP	> 98%	100 g	92,000
150 °C						

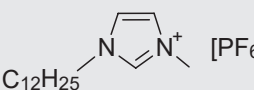
## 1-Dodecyl-3-methylimidazolium bromide

 <p>CAS RN<sup>®</sup> : 61546-00-7 分子式 : C<sub>16</sub>H<sub>31</sub>BrN<sub>2</sub> 分子量 : 331.3</p>	49515-13	ILT	IL-0119-HP	> 98%	25 g	36,000
	49515-14	ILT	IL-0119-HP	> 98%	100 g	77,000
112 °C						

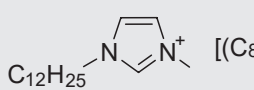
## 1-Dodecyl-3-methylimidazolium iodide

 <p>CAS RN<sup>®</sup> : 81995-09-7 分子式 : C<sub>16</sub>H<sub>31</sub>IN<sub>2</sub> 分子量 : 378.3</p>	49515-19	ILT	IL-0136-HP	> 98%	25 g	80,000
	49515-20	ILT	IL-0136-HP	> 98%	100 g	169,000
40 °C						

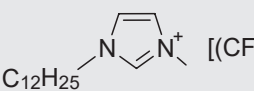
## 1-Dodecyl-3-methylimidazolium hexafluorophosphate

 <p>CAS RN<sup>®</sup> : 219947-93-0 分子式 : C<sub>16</sub>H<sub>31</sub>F<sub>6</sub>N<sub>2</sub>P 分子量 : 396.4</p>	49515-17	ILT	IL-0095-HP	> 98%	25 g	34,000
	49515-18	ILT	IL-0095-HP	> 98%	100 g	68,000
60 °C						

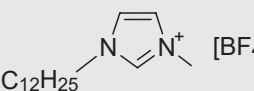
## 1-Dodecyl-3-methylimidazolium bis(2,4,4-trimethylpentyl)phosphinate

 <p>分子式 : C<sub>32</sub>H<sub>65</sub>N<sub>2</sub>O<sub>2</sub>P 分子量 : 540.8</p>	49529-19	ILT	IL-0334-HP	98%	25 g	86,000

## 1-Dodecyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide

 <p>CAS RN<sup>®</sup> : 404001-48-5 分子式 : C<sub>18</sub>H<sub>31</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub> 分子量 : 531.6</p>	49515-11	ILT	IL-0101-HP	> 98%	25 g	41,000
	49515-12	ILT	IL-0101-HP	> 98%	100 g	95,000
136 cP (25 °C)    d 1.25 (22 °C)    0.82 mS/cm (30 °C)						

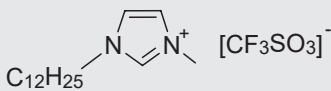
## 1-Dodecyl-3-methylimidazolium tetrafluoroborate

 <p>CAS RN<sup>®</sup> : 244193-59-7 分子式 : C<sub>16</sub>H<sub>31</sub>BF<sub>4</sub>N<sub>2</sub> 分子量 : 338.2</p>	49515-21	ILT	IL-0132-HP	> 98%	25 g	37,000
	49515-22	ILT	IL-0132-HP	> 98%	100 g	75,000
26 °C						

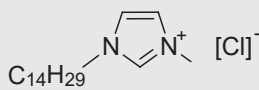


# Imidazolium based ionic liquids

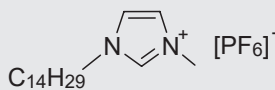
## 1-Dodecyl-3-methylimidazolium triflate

 <p>CAS RN® : 404001-52-1 分子式 : C<sub>17</sub>H<sub>31</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S 分子量 : 400.5</p>	49515-23	ILT	IL-0133-HP	99%	25 g	51,000
	49515-24	ILT	IL-0133-HP	99%	100 g	103,000
47 °C						

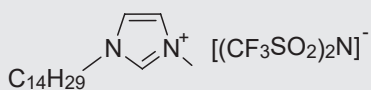
## 1-Methyl-3-tetradecylimidazolium chloride

 <p>CAS RN® : 171058-21-2 分子式 : C<sub>18</sub>H<sub>35</sub>ClN<sub>2</sub> 分子量 : 314.9</p>	49515-27	ILT	IL-0141-HP	> 98%	25 g	44,000
	49515-28	ILT	IL-0141-HP	> 98%	100 g	94,000

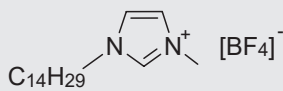
## 1-Methyl-3-tetradecylimidazolium hexafluorophosphate

 <p>CAS RN® : 219947-94-1 分子式 : C<sub>18</sub>H<sub>35</sub>F<sub>6</sub>N<sub>2</sub>P 分子量 : 424.4</p>	49515-30	ILT	IL-0157-HP	> 98%	25 g	46,000
	49515-31	ILT	IL-0157-HP	> 98%	100 g	92,000
69 °C						

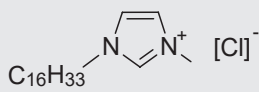
## 1-Methyl-3-tetradecylimidazolium bis(trifluoromethylsulfonyl)imide

 <p>CAS RN® : 404001-49-6 分子式 : C<sub>20</sub>H<sub>35</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub> 分子量 : 559.6</p>	49515-25	ILT	IL-0102-HP	> 98%	25 g	51,000
	49515-26	ILT	IL-0102-HP	> 98%	100 g	115,000
38 °C						

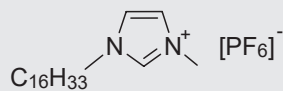
## 1-Methyl-3-tetradecylimidazolium tetrafluoroborate

 <p>CAS RN® : 244193-61-1 分子式 : C<sub>18</sub>H<sub>35</sub>BF<sub>4</sub>N<sub>2</sub> 分子量 : 366.3</p>	49519-17	ILT	IL-0256-HP	> 98%	25 g	49,000
	49519-18	ILT	IL-0256-HP	> 98%	100 g	103,000
37 °C						

## 1-Hexadecyl-3-methylimidazolium chloride

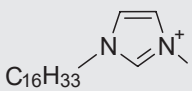
 <p>CAS RN® : 404001-62-3 分子式 : C<sub>20</sub>H<sub>39</sub>ClN<sub>2</sub> 分子量 : 343.0</p>	49515-34	ILT	IL-0115-HP	> 98%	25 g	23,000
	49515-35	ILT	IL-0115-HP	> 98%	100 g	47,000
	35665-1A	ACR	35665-0100		10 g	38,600

## 1-Hexadecyl-3-methylimidazolium hexafluorophosphate

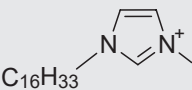
 <p>CAS RN® : 219947-95-2 分子式 : C<sub>20</sub>H<sub>39</sub>F<sub>6</sub>N<sub>2</sub>P 分子量 : 452.5</p>	49515-36	ILT	IL-0158-HP	> 98%	25 g	37,000
	49515-37	ILT	IL-0158-HP	> 98%	100 g	75,000
125 °C						

# Imidazolium based ionic liquids

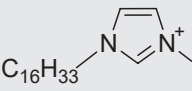
## 1-Hexadecyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide

 <p>CAS RN<sup>®</sup> : 404001-50-9 分子式 : C<sub>22</sub>H<sub>39</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub> 分子量 : 587.7</p> <p>49 °C</p>	49515-32	ILT	IL-0103-HP	> 98%	25 g	42,000
	49515-33	ILT	IL-0103-HP	> 98%	100 g	95,000

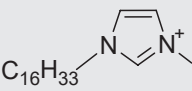
## 1-Hexadecyl-3-methylimidazolium tetrafluoroborate

 <p>CAS RN<sup>®</sup> : 244193-64-4 分子式 : C<sub>20</sub>H<sub>39</sub>BF<sub>4</sub>N<sub>2</sub> 分子量 : 394.3</p> <p>55 °C</p>	49515-38	ILT	IL-0097-HP	> 98%	25 g	40,000
	49515-39	ILT	IL-0097-HP	> 98%	100 g	81,000

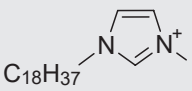
## 1-Hexadecyl-3-methylimidazolium dicyanamide

 <p>CAS RN<sup>®</sup> : 404001-50-9 分子式 : C<sub>22</sub>H<sub>39</sub>N<sub>5</sub> 分子量 : 373.3</p>	49529-21	ILT	IL-0336-HP	> 98%	25 g	46,000

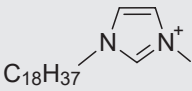
## 1-Hexadecyl-3-methylimidazolium tricyanomethanide

 <p>CAS RN<sup>®</sup> : 404001-50-9 分子式 : C<sub>24</sub>H<sub>39</sub>N<sub>5</sub> 分子量 : 397.6</p>	49529-22	ILT	IL-0337-HP	> 98%	25 g	68,000

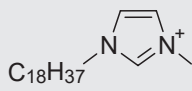
## 1-Methyl-3-octadecylimidazolium chloride

 <p>CAS RN<sup>®</sup> : 171058-19-8 分子式 : C<sub>22</sub>H<sub>43</sub>ClN<sub>2</sub> 分子量 : 371.0</p> <p>210 °C</p>	49515-40	ILT	IL-0160-HP	> 98%	25 g	68,000
	49515-41	ILT	IL-0160-HP	> 98%	100 g	146,000

## 1-Methyl-3-octadecylimidazolium hexafluorophosphate

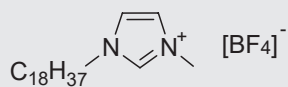
 <p>CAS RN<sup>®</sup> : 219947-96-3 分子式 : C<sub>22</sub>H<sub>43</sub>F<sub>6</sub>N<sub>2</sub>P 分子量 : 480.6</p> <p>88 °C</p>	49515-42	ILT	IL-0159-HP	> 98%	25 g	54,000
	49515-43	ILT	IL-0159-HP	> 98%	100 g	107,000

## 1-Methyl-3-octadecylimidazolium bis(trifluoromethylsulfonyl)imide

 <p>CAS RN<sup>®</sup> : 404001-51-0 分子式 : C<sub>24</sub>H<sub>43</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub> 分子量 : 615.7</p> <p>55-60 °C</p>	49518-35	ILT	IL-0200-HP	> 98%	25 g	54,000
	49518-36	ILT	IL-0200-HP	> 98%	100 g	122,000

# Imidazolium based ionic liquids

## 1-Methyl-3-octadecylimidazolium tetrafluoroborate



CAS RN® : 244193-65-5

分子式 :  $C_{22}H_{43}BF_4N_2$

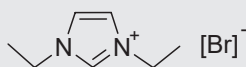
分子量 : 422.4

49528-33    ILT    IL-0210-HP    > 98%    25 g    59,000

# Imidazolium based ionic liquids

## 1-Alkyl-3-ethylimidazolium

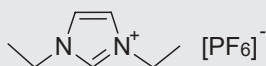
### 1,3-Diethylimidazolium bromide



CAS RN<sup>®</sup> : 54304-66-4  
分子式 : C<sub>7</sub>H<sub>13</sub>BrN<sub>2</sub>  
分子量 : 205.1

49519-54	ILT	IL-0279-HP	98%	25 g	26,000
49519-55	ILT	IL-0279-HP	98%	100 g	43,000

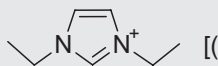
### 1,3-Diethylimidazolium hexafluorophosphate



CAS RN<sup>®</sup> : 370085-15-7  
分子式 : C<sub>7</sub>H<sub>13</sub>F<sub>6</sub>N<sub>2</sub>P  
分子量 : 270.2

49519-58	ILT	IL-0281-HP	98%	25 g	30,000
49519-59	ILT	IL-0281-HP	98%	100 g	58,000

### 1,3-Diethylimidazolium diethylphosphate

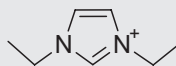


CAS RN<sup>®</sup> : 945406-32-6  
分子式 : C<sub>11</sub>H<sub>23</sub>N<sub>2</sub>O<sub>4</sub>P  
分子量 : 278.3

280 cP (25 °C)    d 1.12 (24 °C)    0.97 mS/cm (30 °C)

49518-93	ILT	IL-0245-HP	> 98%	25 g	34,000
49518-94	ILT	IL-0245-HP	> 98%	100 g	61,000

### 1,3-Diethylimidazolium bis(trifluoromethylsulfonyl)imide

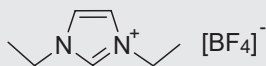


CAS RN<sup>®</sup> : 174899-88-8  
分子式 : C<sub>9</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 405.3

14 °C    28 cP (25 °C)    d 1.48 (22 °C)    7.27 mS/cm (20 °C)

49518-31	ILT	IL-0188-HP	98%	25 g	26,000
49518-32	ILT	IL-0188-HP	98%	100 g	58,000

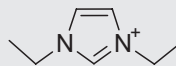
### 1,3-Diethylimidazolium tetrafluoroborate



CAS RN<sup>®</sup> : 847335-65-3  
分子式 : C<sub>7</sub>H<sub>13</sub>BF<sub>4</sub>N<sub>2</sub>  
分子量 : 212.0

49519-56	ILT	IL-0280-HP	98%	25 g	40,000
49519-57	ILT	IL-0280-HP	98%	100 g	74,000

### 1,3-Diethylimidazolium ethylsulfate

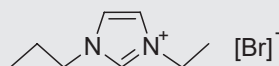


CAS RN<sup>®</sup> : 516474-04-7  
分子式 : C<sub>9</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>S  
分子量 : 250.3

94 cP (25 °C)    d 1.21 (22 °C)

49518-91	ILT	IL-0244-HP	98%	25 g	17,000
49518-92	ILT	IL-0244-HP	98%	100 g	36,000

### 1-Ethyl-3-propylimidazolium bromide

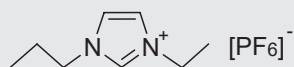


CAS RN<sup>®</sup> : 637348-59-5  
分子式 : C<sub>8</sub>H<sub>15</sub>BrN<sub>2</sub>  
分子量 : 219.1

49519-60	ILT	IL-0282-HP	98%	25 g	23,000
49519-61	ILT	IL-0282-HP	98%	100 g	48,000

# Imidazolium based ionic liquids

## 1-Ethyl-3-propylimidazolium hexafluorophosphate



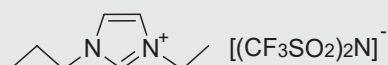
CAS RN® : 1770850-03-7

分子式 : C<sub>8</sub>H<sub>15</sub>F<sub>6</sub>N<sub>2</sub>P

分子量 : 284.2

49519-64	ILT	IL-0284-HP	98%	25 g	33,000
49519-65	ILT	IL-0284-HP	98%	100 g	66,000

## 1-Ethyl-3-propylimidazolium bis(trifluoromethylsulfonyl)imide



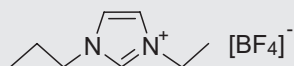
CAS RN® : 347882-21-7

分子式 : C<sub>10</sub>H<sub>15</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 419.4

49519-66	ILT	IL-0285-HP	98%	25 g	32,000
49519-67	ILT	IL-0285-HP	98%	100 g	71,000

## 1-Ethyl-3-propylimidazolium tetrafluoroborate

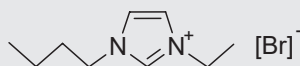


分子式 : C<sub>8</sub>H<sub>15</sub>BF<sub>4</sub>N<sub>2</sub>

分子量 : 226.0

49519-62	ILT	IL-0283-HP	98%	25 g	45,000
49519-63	ILT	IL-0283-HP	98%	100 g	90,000

## 1-Butyl-3-ethylimidazolium bromide



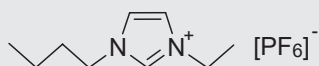
CAS RN® : 174899-64-0

分子式 : C<sub>9</sub>H<sub>17</sub>BrN<sub>2</sub>

分子量 : 233.1

49519-68	ILT	IL-0286-HP	98%	25 g	21,000
49519-69	ILT	IL-0286-HP	98%	100 g	45,000

## 1-Butyl-3-ethylimidazolium hexafluorophosphate



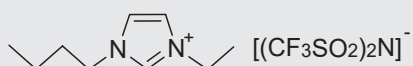
CAS RN® : 256647-89-9

分子式 : C<sub>9</sub>H<sub>17</sub>F<sub>6</sub>N<sub>2</sub>P

分子量 : 298.2

49519-72	ILT	IL-0288-HP	98%	25 g	25,000
49519-73	ILT	IL-0288-HP	98%	100 g	51,000

## 1-Butyl-3-ethylimidazolium bis(trifluoromethylsulfonyl)imide



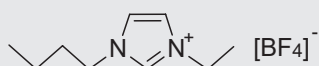
CAS RN® : 174899-89-9

分子式 : C<sub>11</sub>H<sub>17</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 433.4

49519-74	ILT	IL-0289-HP	98%	25 g	26,000
49519-75	ILT	IL-0289-HP	98%	100 g	54,000

## 1-Butyl-3-ethylimidazolium tetrafluoroborate



CAS RN® : 581101-91-9

分子式 : C<sub>9</sub>H<sub>17</sub>BF<sub>4</sub>N<sub>2</sub>

分子量 : 240.1

49519-70	ILT	IL-0287-HP	98%	25 g	26,000
49519-71	ILT	IL-0287-HP	98%	100 g	51,000

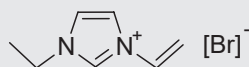
37 cP (25 °C)

6.06 mS/cm (30 °C)

# Imidazolium based ionic liquids

## 1-Alkyl-3-vinylimidazolium

### 1-Ethyl-3-vinylimidazolium bromide



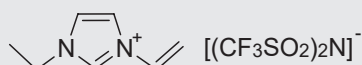
CAS RN® : 34311-88-1

分子式 : C<sub>7</sub>H<sub>11</sub>BrN<sub>2</sub>

分子量 : 203.1

49519-76	ILT	IL-0290-HP	98%	25 g	51,000
49519-77	ILT	IL-0290-HP	98%	100 g	109,000

### 1-Ethyl-3-vinylimidazolium bis(trifluoromethylsulfonyl)imide



CAS RN® : 204854-22-8

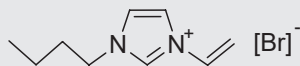
分子式 : C<sub>9</sub>H<sub>11</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 403.3

47 cP (25 °C)    d 1.50 (26.5 °C)    2.69 mS/cm (25 °C)

49519-78	ILT	IL-0291-HP	98%	25 g	58,000
49519-79	ILT	IL-0291-HP	98%	100 g	131,000

### 1-Butyl-3-vinylimidazolium bromide



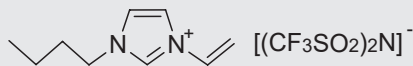
CAS RN® : 34311-90-5

分子式 : C<sub>9</sub>H<sub>15</sub>BrN<sub>2</sub>

分子量 : 231.1

49519-80	ILT	IL-0292-HP	98%	25 g	47,000
49519-81	ILT	IL-0292-HP	98%	100 g	101,000

### 1-Butyl-3-vinylimidazolium bis(trifluoromethylsulfonyl)imide



CAS RN® : 758716-72-2

分子式 : C<sub>11</sub>H<sub>15</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 431.4

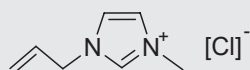
77 cP (25 °C)    d 1.42 (25 °C)    1.41 mS/cm (25 °C)

49519-82	ILT	IL-0293-HP	98%	25 g	54,000
49519-83	ILT	IL-0293-HP	98%	100 g	122,000

# Imidazolium based ionic liquids

## 1-Alkyl-3-allylimidazolium

### 1-Allyl-3-methylimidazolium chloride

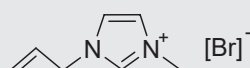


CAS RN® : 65039-10-3  
分子式 : C<sub>7</sub>H<sub>11</sub>ClN<sub>2</sub>  
分子量 : 158.6

47 °C

49515-44	ILT	IL-0022-HP	> 98%	25 g	19,000
49515-45	ILT	IL-0022-HP	> 98%	100 g	33,000

### 1-Allyl-3-methylimidazolium bromide



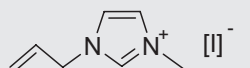
CAS RN® : 31410-07-8  
分子式 : C<sub>7</sub>H<sub>11</sub>BrN<sub>2</sub>  
分子量 : 203.1

58 °C

1.60 mS/cm

01986-55				5 g	8,000
01986-35				25 g	18,000
01986-15				250 g	95,000

### 1-Allyl-3-methylimidazolium iodide

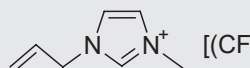


CAS RN® : 65039-07-8  
分子式 : C<sub>7</sub>H<sub>11</sub>I N<sub>2</sub>  
分子量 : 250.1

57 °C

01120-35				25 g	23,000
01120-25				100 g	48,000
49518-57	ILT	IL-0231-HP	> 98%	25 g	69,000
49518-58	ILT	IL-0231-HP	> 98%	100 g	146,000

### 1-Allyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide

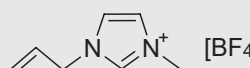


CAS RN® : 655249-87-9  
分子式 : C<sub>9</sub>H<sub>11</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 403.3

35 cP (25 °C)    d 1.49 (29 °C)    8.87 mS/cm (30 °C)

01988-55				5 mL	9,500
01988-35				25 mL	30,000
01988-15				250 mL	120,000
49518-81	ILT	IL-0239-HP	99%	25 g	29,000
49518-82	ILT	IL-0239-HP	99%	100 g	66,000

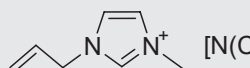
### 1-Allyl-3-methylimidazolium tetrafluoroborate



CAS RN® : 851606-63-8  
分子式 : C<sub>7</sub>H<sub>11</sub>BF<sub>4</sub>N<sub>2</sub>  
分子量 : 210.0

01987-55				5 mL	9,000
01987-35				25 mL	22,000
01987-15				250 mL	95,000

### 1-Allyl-3-methylimidazolium dicyanamide

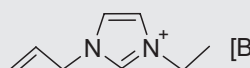


CAS RN® : 917956-73-1  
分子式 : C<sub>9</sub>H<sub>11</sub>N<sub>5</sub>  
分子量 : 189.2

18 cP (25 °C)    d 1.11 (24 °C)    17.0 mS/cm (30 °C)

49518-83	ILT	IL-0240-HP	> 98%	25 g	23,000
49518-84	ILT	IL-0240-HP	> 98%	100 g	51,000

### 1-Allyl-3-ethylimidazolium bromide



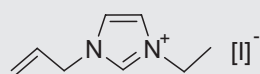
CAS RN® : 652134-09-3  
分子式 : C<sub>9</sub>H<sub>13</sub>BrN<sub>2</sub>  
分子量 : 217.1

55 °C

01930-55				5 g	7,500
01930-35				25 g	18,000
01930-15				250 g	78,000

# Imidazolium based ionic liquids

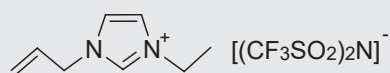
## 1-Allyl-3-ethylimidazolium iodide



CAS RN® : 920981-07-3  
 分子式 : C<sub>8</sub>H<sub>13</sub>N<sub>2</sub>  
 分子量 : 264.1

01119-35	25 mL	22,000
01119-25	100 mL	40,000

## 1-Allyl-3-ethylimidazolium bis(trifluoromethanesulfonyl)imide

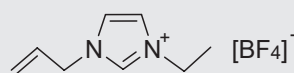


31 cP (25 °C)    d 1.45

CAS RN® : 652134-11-7  
 分子式 : C<sub>10</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 417.4

01932-55	5 mL	9,000
01932-35	25 mL	30,000
01932-15	250 mL	130,000

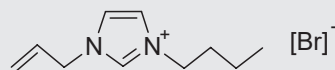
## 1-Allyl-3-ethylimidazolium tetrafluoroborate



CAS RN® : 945732-42-3  
 分子式 : C<sub>8</sub>H<sub>13</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 224.0

01931-55	5 mL	8,000
01931-35	25 mL	24,000
01931-15	250 mL	90,000

## 1-Allyl-3-butylimidazolium bromide

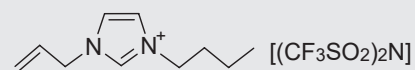


d 1.24    0.50 mS/cm

CAS RN® : 863498-30-0  
 分子式 : C<sub>10</sub>H<sub>17</sub>BrN<sub>2</sub>  
 分子量 : 245.2

01933-55	5 mL	8,000
01933-35	25 mL	20,000
01933-15	250 mL	84,000

## 1-Allyl-3-butylimidazolium bis(trifluoromethanesulfonyl)imide

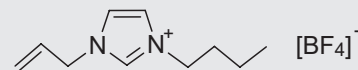


46 cP (25 °C)    d 1.38    1.53 mS/cm

CAS RN® : 863498-34-4  
 分子式 : C<sub>12</sub>H<sub>17</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 445.4

01935-55	5 mL	10,000
01935-35	25 mL	30,000
01935-15	250 mL	110,000

## 1-Allyl-3-butylimidazolium tetrafluoroborate

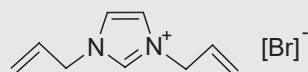


1.22 mS/cm

CAS RN® : 863498-32-2  
 分子式 : C<sub>10</sub>H<sub>17</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 252.1

01934-55	5 mL	9,000
01934-35	25 mL	24,000
01934-15	250 mL	94,000

## 1,3-Diallylimidazolium bromide



827 cP (25 °C)    d 1.32    0.74 mS/cm

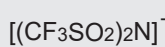
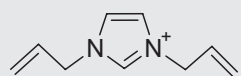
CAS RN® : 31483-71-3  
 分子式 : C<sub>9</sub>H<sub>13</sub>BrN<sub>2</sub>  
 分子量 : 229.1

11475-55	5 mL	8,000
11475-35	25 mL	20,000
11475-15	250 mL	93,000



# Imidazolium based ionic liquids

## 1,3-Diallylimidazolium bis(trifluoromethanesulfonyl)imide

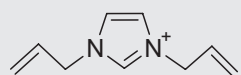


CAS RN<sup>®</sup> : 803732-17-4  
 分子式 : C<sub>11</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 429.4

31 cP (27 °C)    d 1.43    2.63 mS/cm

11477-55	5 mL	10,000
11477-35	25 mL	30,000
11477-15	250 mL	124,000

## 1,3-Diallylimidazolium tetrafluoroborate



CAS RN<sup>®</sup> : 852699-06-0  
 分子式 : C<sub>9</sub>H<sub>13</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 236.0

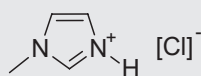
2.44 mS/cm

11476-55	5 mL	10,000
11476-35	25 mL	29,000
11476-15	250 mL	120,000

# Imidazolium based ionic liquids

## Imidazolium [Others]

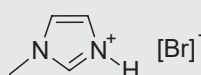
### 1-Methylimidazolium chloride



CAS RN<sup>®</sup> : 35487-17-3  
 分子式 : C<sub>4</sub>H<sub>7</sub>ClN<sub>2</sub>  
 分子量 : 118.6

49518-15	ILT	IL-0094-SG	98%	25 g	16,000
49518-16	ILT	IL-0094-SG	98%	100 g	28,000

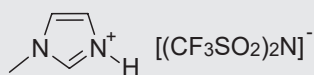
### 1-Methylimidazolium bromide



CAS RN<sup>®</sup> : 101023-58-9  
 分子式 : C<sub>4</sub>H<sub>7</sub>BrN<sub>2</sub>  
 分子量 : 163.0

49519-36	ILT	IL-0267-SG	98%	25 g	17,000
49519-37	ILT	IL-0267-SG	98%	100 g	30,000

### 1-Methylimidazolium bis(trifluoromethylsulfonyl)imide

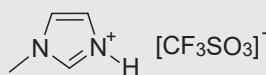


CAS RN<sup>®</sup> : 353239-08-4  
 分子式 : C<sub>6</sub>H<sub>7</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 363.3

49 °C

49519-27	ILT	IL-0261-SG	98%	25 g	34,000
49519-28	ILT	IL-0261-SG	98%	100 g	60,000
49210-02	SOLVI	IM0008B50	99.5%	50 g	75,000

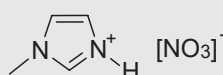
### 1-Methylimidazolium trifluoromethanesulfonate



CAS RN<sup>®</sup> : 99257-94-0  
 分子式 : C<sub>5</sub>H<sub>7</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S  
 分子量 : 232.2

49519-32	ILT	IL-0263-SG	98%	25 g	47,000
49519-33	ILT	IL-0263-SG	98%	100 g	84,000

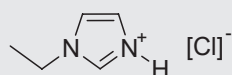
### 1-Methylimidazolium nitrate



CAS RN<sup>®</sup> : 156204-43-2  
 分子式 : C<sub>4</sub>H<sub>7</sub>N<sub>3</sub>O<sub>3</sub>  
 分子量 : 145.1

49519-34	ILT	IL-0264-SG	98%	25 g	20,000
49519-35	ILT	IL-0264-SG	98%	100 g	36,000

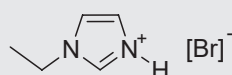
### 1-Ethylimidazolium chloride



CAS RN<sup>®</sup> : 81505-35-3  
 分子式 : C<sub>5</sub>H<sub>9</sub>ClN<sub>2</sub>  
 分子量 : 132.6

49519-46	ILT	IL-0275-SG	98%	25 g	17,000
49519-47	ILT	IL-0275-SG	98%	100 g	30,000

### 1-Ethylimidazolium bromide

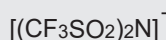
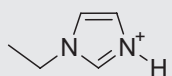


CAS RN<sup>®</sup> : 501693-36-3  
 分子式 : C<sub>5</sub>H<sub>9</sub>BrN<sub>2</sub>  
 分子量 : 177.0

49519-48	ILT	IL-0276-SG	98%	25 g	21,000
49519-49	ILT	IL-0276-SG	98%	100 g	34,000

# Imidazolium based ionic liquids

## 1-Ethylimidazolium bis(trifluoromethylsulfonyl)imide



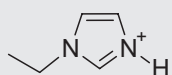
CAS RN® : 353239-10-8

分子式 : C<sub>7</sub>H<sub>9</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 377.3

49519-38	ILT	IL-0269-SG	98%	25 g	36,000
49519-39	ILT	IL-0269-SG	98%	100 g	63,000

## 1-Ethylimidazolium nitrate



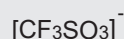
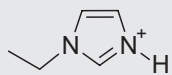
CAS RN® : 501693-38-5

分子式 : C<sub>5</sub>H<sub>9</sub>N<sub>3</sub>O<sub>3</sub>

分子量 : 159.1

49519-44	ILT	IL-0272-SG	98%	25 g	23,000
49519-45	ILT	IL-0272-SG	98%	100 g	37,000

## 1-Ethylimidazolium trifluoromethanesulfonate



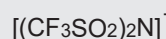
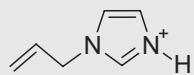
CAS RN® : 501693-46-5

分子式 : C<sub>6</sub>H<sub>9</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S

分子量 : 246.2

49519-42	ILT	IL-0271-SG	98%	25 g	51,000
49519-43	ILT	IL-0271-SG	98%	100 g	88,000

## 1-Allyl-3H-imidazolium bis(trifluoromethanesulfonyl)imide

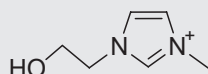


分子式 : C<sub>8</sub>H<sub>9</sub>F<sub>6</sub>O<sub>4</sub>S<sub>2</sub>N<sub>3</sub>

分子量 : 389.3

49210-00	SOLVI	IM2308C50	99%	50 g	94,000
----------	-------	-----------	-----	------	--------

## 1-(2-Hydroxyethyl)-3-methylimidazolium chloride



CAS RN® : 61755-34-8

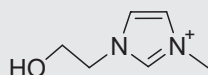
分子式 : C<sub>6</sub>H<sub>11</sub>ClN<sub>2</sub>O

分子量 : 162.6

83 °C

49515-48	ILT	IL-0039-HP	99%	25 g	19,000
49515-49	ILT	IL-0039-HP	99%	100 g	36,000

## 1-(2-Hydroxyethyl)-3-methylimidazolium bis(trifluoromethylsulfonyl)imide



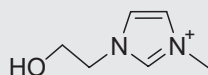
CAS RN® : 174899-86-6

分子式 : C<sub>8</sub>H<sub>11</sub>F<sub>6</sub>N<sub>3</sub>O<sub>5</sub>S<sub>2</sub>

分子量 : 407.3

49527-65	ILT	IL-0194-HP	99%	25 g	25,000
49527-66	ILT	IL-0194-HP	99%	100 g	58,000
49210-01	SOLVI	IM2008B50	99.5%	50 g	98,000

## 1-(2-Hydroxyethyl)-3-methylimidazolium tetrafluoroborate



CAS RN® : 374564-83-7

分子式 : C<sub>6</sub>H<sub>11</sub>BF<sub>4</sub>N<sub>2</sub>O

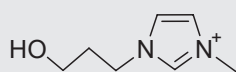
分子量 : 214.0

49515-50	ILT	IL-0038-HP	> 98%	25 g	22,000
49515-51	ILT	IL-0038-HP	> 98%	100 g	45,000

137 cP (20 °C)    d 1.34 (22 °C)    3.42 mS/cm (20 °C)

# Imidazolium based ionic liquids

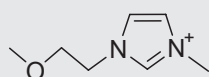
## 1-(3-Hydroxypropyl)-3-methylimidazolium bis(trifluoromethanesulfonyl)imide



CAS RN<sup>®</sup> : 827027-30-5  
 分子式 : C<sub>9</sub>H<sub>13</sub>F<sub>6</sub>O<sub>5</sub>S<sub>2</sub>N<sub>3</sub>  
 分子量 : 421.3

49210-03 SOLVI IM3008B10 99.5% 10 g 62,000

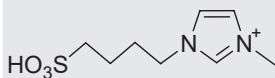
## 1-(2-Methoxyethyl)-3-methylimidazolium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 178631-01-1  
 分子式 : C<sub>9</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>5</sub>S<sub>2</sub>  
 分子量 : 421.3

49529-18 ILT IL-0333-HP 98% 25 g 47,000

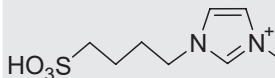
## 1-(4-Sulfobutyl)-3-methylimidazolium bis(trifluoromethanesulfonyl)imide



CAS RN<sup>®</sup> : 909390-59-6  
 分子式 : C<sub>10</sub>H<sub>15</sub>F<sub>6</sub>O<sub>7</sub>S<sub>3</sub>N<sub>3</sub>  
 分子量 : 499.4

49210-04 SOLVI IMSF1808C10 99% 10 g 71,000

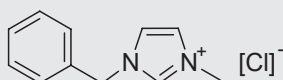
## 1-(4-Sulfobutyl)-3-methylimidazolium trifluoromethanesulfonate



CAS RN<sup>®</sup> : 657414-80-7  
 分子式 : C<sub>9</sub>H<sub>15</sub>F<sub>3</sub>O<sub>6</sub>S<sub>2</sub>N<sub>2</sub>  
 分子量 : 368.4

49210-10 SOLVI IMSF1705C10 99% 10 g 71,000

## 1-Benzyl-3-methylimidazolium chloride



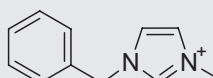
70-82 °C

CAS RN<sup>®</sup> : 36443-80-8  
 分子式 : C<sub>11</sub>H<sub>13</sub>ClN<sub>2</sub>  
 分子量 : 208.7

49515-46 ILT IL-0140-HP 99% 25 g 26,000

49515-47 ILT IL-0140-HP 99% 100 g 55,000

## 1-Benzyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide



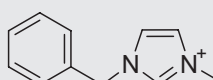
153 cP (25 °C) d 1.49 (25 °C) 1.77 mS/cm (30 °C)

CAS RN<sup>®</sup> : 433337-24-7  
 分子式 : C<sub>13</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 453.4

49518-85 ILT IL-0241-HP 99% 25 g 30,000

49518-86 ILT IL-0241-HP 99% 100 g 68,000

## 1-Benzyl-3-methylimidazolium tetrafluoroborate

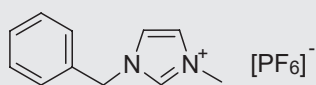


CAS RN<sup>®</sup> : 500996-04-3  
 分子式 : C<sub>11</sub>H<sub>13</sub>BF<sub>4</sub>N  
 分子量 : 260.0

49528-28 ILT IL-0193-HP 99% 25 g 24,000

# Imidazolium based ionic liquids

## 1-Benzyl-3-methylimidazolium hexafluorophosphate



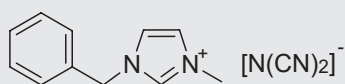
CAS RN® : 433337-11-2

分子式 : C<sub>11</sub>H<sub>13</sub>F<sub>6</sub>N<sub>2</sub>P

分子量 : 318.2

49528-26    ILT    IL-0187-HP    99%    25 g    24,000

## 1-Benzyl-3-methylimidazolium dicyanamide



CAS RN® : 958445-60-8

分子式 : C<sub>13</sub>H<sub>13</sub>N<sub>5</sub>

分子量 : 239.3

49518-87    ILT    IL-0242-HP    > 98%    25 g    28,000

49518-88    ILT    IL-0242-HP    > 98%    100 g    64,000

79 cP (25 °C)

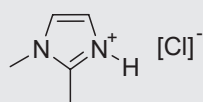
d 1.16 (24 °C)

2.95 mS/cm (30 °C)

# Imidazolium based ionic liquids

## 1,2,3-Alkylimidazolium

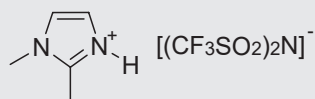
### 1,2-Dimethylimidazolium chloride



CAS RN<sup>®</sup> : 34531-53-8  
 分子式 : C<sub>5</sub>H<sub>9</sub>ClN<sub>2</sub>  
 分子量 : 132.6

49519-50	ILT	IL-0277-SG	98%	25 g	21,000
49519-51	ILT	IL-0277-SG	98%	100 g	36,000

### 1,2-Dimethylimidazolium bis(trifluoromethylsulfonyl)imide



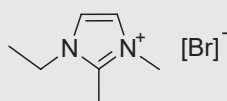
CAS RN<sup>®</sup> : 353239-12-0  
 分子式 : C<sub>7</sub>H<sub>9</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 377.3

106 cP (25 °C)

1.08 mS/cm (25 °C)

49519-52	ILT	IL-0278-SG	98%	25 g	47,000
49519-53	ILT	IL-0278-SG	98%	100 g	81,000

### 1-Ethyl-2,3-dimethylimidazolium bromide

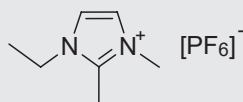


CAS RN<sup>®</sup> : 98892-76-3  
 分子式 : C<sub>7</sub>H<sub>13</sub>BrN<sub>2</sub>  
 分子量 : 205.1

140 °C

49515-54	ILT	IL-0135-HP	99%	25 g	20,000
49515-55	ILT	IL-0135-HP	99%	100 g	37,000

### 1-Ethyl-2,3-dimethylimidazolium hexafluorophosphate

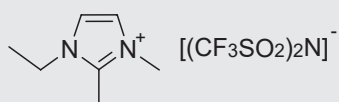


CAS RN<sup>®</sup> : 292140-86-4  
 分子式 : C<sub>7</sub>H<sub>13</sub>F<sub>6</sub>N<sub>2</sub>P  
 分子量 : 270.2

> 300 °C

49515-56	ILT	IL-0139-HP	99%	25 g	41,000
49515-57	ILT	IL-0139-HP	99%	100 g	81,000

### 1-Ethyl-2,3-dimethylimidazolium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 174899-90-2  
 分子式 : C<sub>9</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 405.3

25 °C

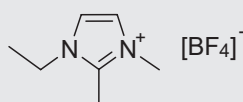
69 cP (25 °C)

d 1.49 (25 °C)

3.18 mS/cm (20 °C)

49515-52	ILT	IL-0106-HP	99%	25 g	29,000
49515-53	ILT	IL-0106-HP	99%	100 g	67,000

### 1-Ethyl-2,3-dimethylimidazolium tetrafluoroborate

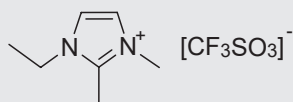


CAS RN<sup>®</sup> : 307492-75-7  
 分子式 : C<sub>7</sub>H<sub>13</sub>BF<sub>4</sub>N<sub>2</sub>  
 分子量 : 212.0

104 °C

49515-58	ILT	IL-0001-HP	> 98%	25 g	39,000
49515-59	ILT	IL-0001-HP	> 98%	100 g	79,000

### 1-Ethyl-2,3-dimethylimidazolium triflate



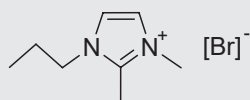
CAS RN<sup>®</sup> : 174899-72-0  
 分子式 : C<sub>8</sub>H<sub>13</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S  
 分子量 : 274.3

105 °C

49515-60	ILT	IL-0002-HP	99%	25 g	66,000
49515-61	ILT	IL-0002-HP	99%	100 g	132,000

# Imidazolium based ionic liquids

## 1,2-Dimethyl-3-propylimidazolium bromide

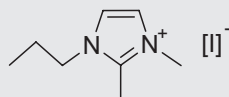


CAS RN® : 107937-17-7  
分子式 : C<sub>8</sub>H<sub>15</sub>BrN<sub>2</sub>  
分子量 : 219.1

120 °C

49518-55	ILT	IL-0229-HP	99%	25 g	26,000
49518-56	ILT	IL-0229-HP	99%	100 g	56,000

## 1,2-Dimethyl-3-propylimidazolium iodide

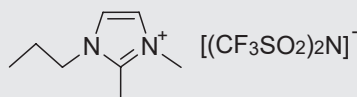


CAS RN® : 218151-78-1  
分子式 : C<sub>8</sub>H<sub>15</sub>I N<sub>2</sub>  
分子量 : 266.1

94 °C

11507-35				25 g	20,000
11507-25				100 g	55,000
49515-64	ILT	IL-0049-HP	> 98%	25 g	16,000
49515-65	ILT	IL-0049-HP	> 98%	100 g	34,000

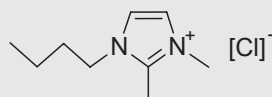
## 1,2-Dimethyl-3-propylimidazolium bis(trifluoromethylsulfonyl)imide



CAS RN® : 169051-76-7  
分子式 : C<sub>10</sub>H<sub>15</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 419.4

49515-62	ILT	IL-0134-HP	99%	25 g	32,000
49515-63	ILT	IL-0134-HP	99%	100 g	73,000

## 1-Butyl-2,3-dimethylimidazolium chloride

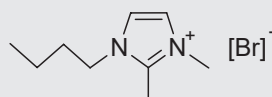


CAS RN® : 98892-75-2  
分子式 : C<sub>9</sub>H<sub>17</sub>ClN<sub>2</sub>  
分子量 : 188.7

100 °C

49515-70	ILT	IL-0056-HP	99%	25 g	24,000
49515-71	ILT	IL-0056-HP	99%	100 g	43,000

## 1-Butyl-2,3-dimethylimidazolium bromide

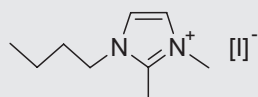


CAS RN® : 475575-45-2  
分子式 : C<sub>9</sub>H<sub>17</sub>BrN<sub>2</sub>  
分子量 : 233.1

102-106 °C

49515-68	ILT	IL-0055-HP	99%	25 g	22,000
49515-69	ILT	IL-0055-HP	99%	100 g	39,000

## 1-Butyl-2,3-dimethylimidazolium iodide

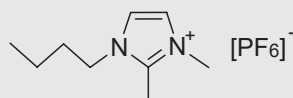


CAS RN® : 108203-70-9  
分子式 : C<sub>9</sub>H<sub>17</sub>I N<sub>2</sub>  
分子量 : 280.1

85 °C

49515-74	ILT	IL-0137-HP	> 98%	25 g	34,000
49515-75	ILT	IL-0137-HP	> 98%	100 g	61,000

## 1-Butyl-2,3-dimethylimidazolium hexafluorophosphate



CAS RN® : 227617-70-1  
分子式 : C<sub>9</sub>H<sub>17</sub>F<sub>6</sub>N<sub>2</sub>P  
分子量 : 298.2

43 °C

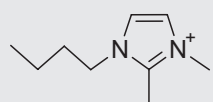
554 cP (45 °C)

0.76 mS/cm (45 °C)

49515-72	ILT	IL-0057-HP	99%	25 g	25,000
49515-73	ILT	IL-0057-HP	99%	100 g	51,000

# Imidazolium based ionic liquids

## 1-Butyl-2,3-dimethylimidazolium bis(trifluoromethylsulfonyl)imide

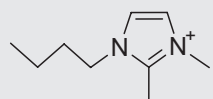


CAS RN<sup>®</sup> : 350493-08-2  
 分子式 : C<sub>11</sub>H<sub>17</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 433.4

98 cP (25 °C)      d 1.42 (25 °C)      1.67 mS/cm (20 °C)

49515-66	ILT	IL-0104-HP	99%	25 g	17,000
49515-67	ILT	IL-0104-HP	99%	100 g	47,000

## 1-Butyl-2,3-dimethylimidazolium tetrafluoroborate

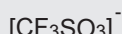
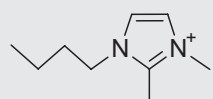


CAS RN<sup>®</sup> : 402846-78-0  
 分子式 : C<sub>9</sub>H<sub>17</sub>N<sub>2</sub>BF<sub>4</sub>  
 分子量 : 240.1

36 °C      173 cP (45 °C)      2.16 mS/cm (45 °C)

49515-76	ILT	IL-0058-HP	99%	25 g	26,000
49515-77	ILT	IL-0058-HP	99%	100 g	51,000

## 1-Butyl-2,3-dimethylimidazolium triflate

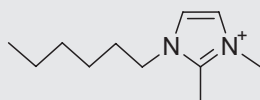


CAS RN<sup>®</sup> : 765910-73-4  
 分子式 : C<sub>10</sub>H<sub>17</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S  
 分子量 : 302.3

40 °C

49515-78	ILT	IL-0059-HP	99%	25 g	48,000
49515-79	ILT	IL-0059-HP	99%	100 g	96,000
35683-1A	ACR	35683-0100		10 g	54,500
49505-92	M	4.90115.0025	≥ 98%	25 g	19,400
49506-78	M	4.90115.0100	≥ 98%	100 g	58,200

## 1-Hexyl-2,3-dimethylimidazolium iodide

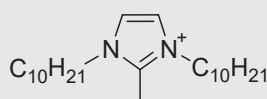


CAS RN<sup>®</sup> : 288627-94-1  
 分子式 : C<sub>11</sub>H<sub>21</sub>IN<sub>2</sub>  
 分子量 : 308.2

79 °C

49518-25	ILT	IL-0138-HP	> 98%	25 g	37,000
49518-26	ILT	IL-0138-HP	> 98%	100 g	67,000

## 1,3-Didecyl-2-methylimidazolium chloride



CAS RN<sup>®</sup> : 70862-65-6  
 分子式 : C<sub>24</sub>H<sub>47</sub>ClN<sub>2</sub>  
 分子量 : 399.1

160-165 °C

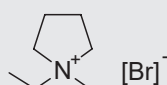
49515-80	ILT	IL-0046-HP	> 98%	25 g	54,000
49515-81	ILT	IL-0046-HP	> 98%	100 g	96,000



# Pyrrolidinium based ionic liquids

## 1-Alkyl-1-methylpyrrolidinium

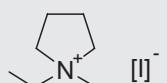
### 1-Ethyl-1-methylpyrrolidinium bromide



CAS RN® : 69227-51-6  
分子式 : C<sub>7</sub>H<sub>16</sub>BrN  
分子量 : 194.1

49517-23	ILT	IL-0163-HP	99%	25 g	17,000
49517-24	ILT	IL-0163-HP	99%	100 g	31,000

### 1-Ethyl-1-methylpyrrolidinium iodide

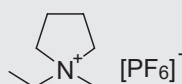


CAS RN® : 4186-68-9  
分子式 : C<sub>7</sub>H<sub>16</sub>IN  
分子量 : 241.1

> 300 °C

49517-27	ILT	IL-0164-HP	> 98%	25 g	42,000
49517-28	ILT	IL-0164-HP	> 98%	100 g	84,000

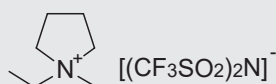
### 1-Ethyl-1-methylpyrrolidinium hexafluorophosphate



CAS RN® : 121057-90-7  
分子式 : C<sub>7</sub>H<sub>16</sub>F<sub>6</sub>NP  
分子量 : 259.2

49517-25	ILT	IL-0166-HP	99%	25 g	49,000
49517-26	ILT	IL-0166-HP	99%	100 g	90,000

### 1-Ethyl-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide

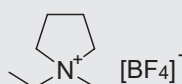


CAS RN® : 223436-99-5  
分子式 : C<sub>9</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 394.4

91 °C

49517-21	ILT	IL-0167-HP	99%	25 g	26,000
49517-22	ILT	IL-0167-HP	99%	100 g	57,000

### 1-Ethyl-1-methylpyrrolidinium tetrafluoroborate

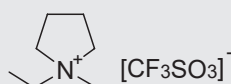


CAS RN® : 117947-85-0  
分子式 : C<sub>7</sub>H<sub>16</sub>BF<sub>4</sub>N  
分子量 : 201.0

292 °C

49517-30	ILT	IL-0165-HP	> 98%	25 g	60,000
49517-31	ILT	IL-0165-HP	> 98%	100 g	106,000
49528-25	ILT	IL-0165-UP	> 99%	25 g	70,000

### 1-Ethyl-1-methylpyrrolidinium triflate

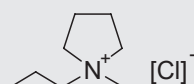


CAS RN® : 893443-18-0  
分子式 : C<sub>8</sub>H<sub>16</sub>F<sub>3</sub>NO<sub>3</sub>S  
分子量 : 263.3

107 °C

49517-32	ILT	IL-0168-HP	99%	25 g	56,000
49517-33	ILT	IL-0168-HP	99%	100 g	112,000
49210-11	SOLVI	PYR0205B10	99.5%	10 g	69,000

### 1-Methyl-1-propylpyrrolidinium chloride

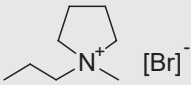


CAS RN® : 528818-82-8  
分子式 : C<sub>8</sub>H<sub>18</sub>ClN  
分子量 : 163.7

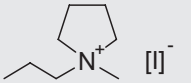
49517-38	ILT	IL-0146-HP	99%	25 g	27,000
49517-39	ILT	IL-0146-HP	99%	100 g	49,000

# Pyrrolidinium based ionic liquids

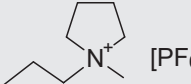
## 1-Methyl-1-propylpyrrolidinium bromide

	CAS RN® : 608140-09-6	49517-36	ILT	IL-0145-HP	99%	25 g	28,000
	分子式 : C <sub>8</sub> H <sub>18</sub> BrN 分子量 : 208.1	49517-37	ILT	IL-0145-HP	99%	100 g	56,000
210 °C							

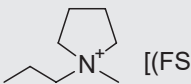
## 1-Methyl-1-propylpyrrolidinium iodide

	CAS RN® : 56511-19-4	49517-42	ILT	IL-0161-HP	> 98%	25 g	29,000
	分子式 : C <sub>8</sub> H <sub>18</sub> IN 分子量 : 255.1	49517-43	ILT	IL-0161-HP	> 98%	100 g	60,000
120 °C							

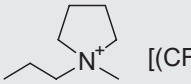
## 1-Methyl-1-propylpyrrolidinium hexafluorophosphate

	CAS RN® : 327022-58-2	49517-40	ILT	IL-0148-HP	99%	25 g	51,000
	分子式 : C <sub>8</sub> H <sub>18</sub> F <sub>6</sub> NP 分子量 : 273.2	49517-41	ILT	IL-0148-HP	99%	100 g	90,000
112 °C							

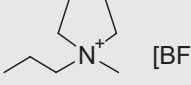
## N-Methyl-N-propylpyrrolidinium bis(fluorosulfonyl)imide

	CAS RN® : 852620-97-4	25978-35				25 mL	34,000
	分子式 : C <sub>8</sub> H <sub>18</sub> F <sub>2</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 308.4						
-10 °C      41 cP (24 °C)      d 1.35 (29 °C)							

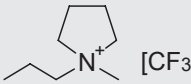
## N-Methyl-N-propylpyrrolidinium bis(trifluoromethanesulfonyl)imide

	CAS RN® : 223437-05-6	26050-55				5 mL	9,500
	分子式 : C <sub>10</sub> H <sub>18</sub> F <sub>6</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 408.4	26050-35				25 mL	33,000
	59 cP (25 °C)      d 1.43 (29 °C)      4.92 mS/cm (30 °C)	49517-34	ILT	IL-0044-HP	99%	25 g	18,000
		49517-35	ILT	IL-0044-HP	99%	100 g	35,000
		49518-08	ILT	IL-0044-UP	99.5%	25 g	26,000
		49518-09	ILT	IL-0044-UP	99.5%	100 g	58,000

## 1-Methyl-1-propylpyrrolidinium tetrafluoroborate

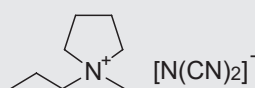
	CAS RN® : 327022-59-3	49528-24	ILT	IL-0147-HP	98%	25 g	43,000
	分子式 : C <sub>8</sub> H <sub>18</sub> BF <sub>4</sub> N 分子量 : 215.0						

## 1-Methyl-1-propylpyrrolidinium triflate

	CAS RN® : 1224852-54-3	49517-44	ILT	IL-0162-HP	99%	25 g	55,000
	分子式 : C <sub>9</sub> H <sub>18</sub> F <sub>3</sub> NO <sub>3</sub> S 分子量 : 277.3	49517-45	ILT	IL-0162-HP	99%	100 g	112,000

# Pyrrrolidinium based ionic liquids

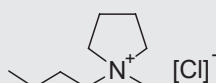
## 1-Methyl-1-propylpyrrolidinium dicyanamide



CAS RN® : 327022-60-6  
分子式 : C<sub>10</sub>H<sub>18</sub>N<sub>4</sub>  
分子量 : 194.3

49519-03	ILT	IL-0249-HP	> 98%	25 g	58,000
49519-04	ILT	IL-0249-HP	> 98%	100 g	116,000

## 1-Butyl-1-methylpyrrolidinium chloride

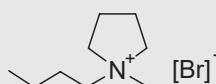


CAS RN® : 479500-35-1  
分子式 : C<sub>9</sub>H<sub>20</sub>ClN  
分子量 : 177.7

198 °C

49517-50	ILT	IL-0075-HP	99%	25 g	21,000
49517-51	ILT	IL-0075-HP	99%	100 g	36,000
49503-38	M	4.90028.0025	≥ 98%	25 g	8,800
49503-39	M	4.90028.0100	≥ 98%	100 g	17,400

## 1-Butyl-1-methylpyrrolidinium bromide

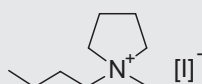


CAS RN® : 93457-69-3  
分子式 : C<sub>9</sub>H<sub>20</sub>BrN  
分子量 : 222.2

216 °C

49517-48	ILT	IL-0074-HP	99%	25 g	21,000
49517-49	ILT	IL-0074-HP	99%	100 g	36,000

## 1-Butyl-1-methylpyrrolidinium iodide

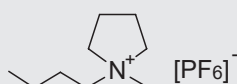


CAS RN® : 56511-17-2  
分子式 : C<sub>9</sub>H<sub>20</sub>IN  
分子量 : 269.2

189 °C

49517-56	ILT	IL-0050-HP	> 98%	25 g	33,000
49517-57	ILT	IL-0050-HP	> 98%	100 g	66,000

## 1-Butyl-1-methylpyrrolidinium hexafluorophosphate

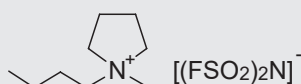


CAS RN® : 330671-29-9  
分子式 : C<sub>9</sub>H<sub>20</sub>F<sub>6</sub>NP  
分子量 : 287.2

87 °C

49517-54	ILT	IL-0076-HP	99%	25 g	34,000
49517-55	ILT	IL-0076-HP	99%	100 g	60,000

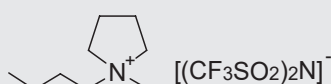
## 1-Butyl-1-methylpyrrolidinium bis(fluorosulfonyl)imide



分子式 : C<sub>9</sub>H<sub>20</sub>F<sub>2</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 322.4

49210-20	SOLVI	PYR0433A	99.9%	50 g	80,000
----------	-------	----------	-------	------	--------

## N-Butyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide



CAS RN® : 223437-11-4  
分子式 : C<sub>11</sub>H<sub>20</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 422.4

-18 °C

72 cP (25 °C)

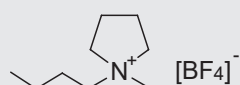
d 1.40 (23 °C)

2.12 mS/cm (20 °C)

26125-53				5 mL	7,000
26125-33				25 mL	31,000
49518-04	ILT	IL-0035-UP	99.5%	25 g	26,000
49518-05	ILT	IL-0035-UP	99.5%	100 g	58,000
49210-19	SOLVI	PYR0408A	99.9%	50 g	52,000

# Pyrrolidinium based ionic liquids

## 1-Butyl-1-methylpyrrolidinium tetrafluoroborate

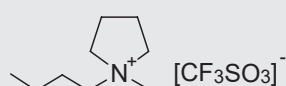


CAS RN<sup>®</sup> : 345984-11-4  
 分子式 : C<sub>9</sub>H<sub>20</sub>BF<sub>4</sub>N  
 分子量 : 229.1

155 °C

49517-58	ILT	IL-0077-HP	99%	25 g	32,000
49517-59	ILT	IL-0077-HP	99%	100 g	56,000

## 1-Butyl-1-methylpyrrolidinium triflate

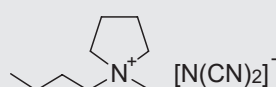


CAS RN<sup>®</sup> : 367522-96-1  
 分子式 : C<sub>10</sub>H<sub>20</sub>F<sub>3</sub>NO<sub>3</sub>S  
 分子量 : 291.3

3 °C      148 cP (25 °C)      d 1.26 (27 °C)      1.85 mS/cm (24 °C)

49517-60	ILT	IL-0113-HP	99%	25 g	31,000
49517-61	ILT	IL-0113-HP	99%	100 g	83,000
49503-48	M	4.90029.0025	> 98%	25 g	16,100
49503-49	M	4.90029.0100	> 98%	100 g	39,700

## 1-Butyl-1-methylpyrrolidinium dicyanamide

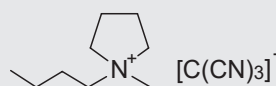


CAS RN<sup>®</sup> : 370865-80-8  
 分子式 : C<sub>11</sub>H<sub>20</sub>N<sub>4</sub>  
 分子量 : 208.3

35 cP (25 °C)      d 1.02 (20 °C)      3.25 mS/cm (24 °C)

49517-52	ILT	IL-0041-HP	> 98%	25 g	36,000
49517-53	ILT	IL-0041-HP	> 98%	100 g	73,000
49503-40	M	4.90044.0025	> 98%	25 g	13,200
49503-41	M	4.90044.0100	> 98%	100 g	39,300

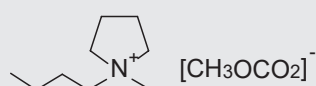
## 1-Butyl-1-methylpyrrolidinium tricyanomethanide



CAS RN<sup>®</sup> : 878027-72-6  
 分子式 : C<sub>13</sub>H<sub>20</sub>N<sub>4</sub>  
 分子量 : 232.3

49527-47	ILT	IL-0318-HP	98%	25 g	27,000
49527-48	ILT	IL-0318-HP	98%	100 g	48,000

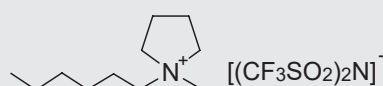
## 1-Butyl-1-methylpyrrolidinium methylcarbonate, 50% in methanol



CAS RN<sup>®</sup> : 1223496-96-5  
 分子式 : C<sub>11</sub>H<sub>23</sub>NO<sub>3</sub>  
 分子量 : 217.2

49529-28	ILT	IN-0029-SG	> 97%	25 g	28,000
----------	-----	------------	-------	------	--------

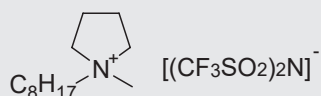
## 1-Hexyl-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 380497-19-8  
 分子式 : C<sub>13</sub>H<sub>24</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 450.5

49528-12	ILT	IL-0092-HP	99%	25 g	26,000
----------	-----	------------	-----	------	--------

## 1-Methyl-1-octylpyrrolidinium bis(trifluoromethylsulfonyl)imide



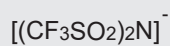
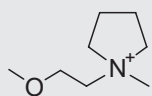
CAS RN<sup>®</sup> : 927021-43-0  
 分子式 : C<sub>15</sub>H<sub>28</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 478.5

49528-17	ILT	IL-0121-HP	99%	25 g	38,000
----------	-----	------------	-----	------	--------

# Pyrrolidinium based ionic liquids

## 1-Methyl-1-(X)pyrrolidinium

### *N*-(2-Methoxyethyl)-*N*-methyl-pyrrolidinium bis(trifluoromethanesulfonyl)imide

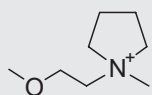


CAS RN<sup>®</sup> : 757240-24-7  
 分子式 : C<sub>10</sub>H<sub>18</sub>F<sub>6</sub>N<sub>2</sub>O<sub>5</sub>S<sub>2</sub>  
 分子量 : 424.4

-95 °C      50 cP (25 °C)      d 1.45      3.8 mS/cm

25966-55	5 mL	9,500
25966-35	25 mL	33,000
25966-05	500 g	☆

### *N*-(2-Methoxyethyl)-*N*-methyl-pyrrolidinium tetrafluoroborate



CAS RN<sup>®</sup> : 464927-76-2  
 分子式 : C<sub>8</sub>H<sub>18</sub>BF<sub>4</sub>NO  
 分子量 : 231.0

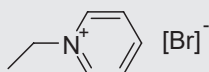
18 °C      154 cP (25 °C)      d 1.23      2.9 mS/cm

25967-45	10 mL	6,200
25967-25	100 mL	41,000
25967-05	500 g	☆

# Pyridinium based ionic liquids

## 1-Alkylpyridinium

### 1-Ethylpyridinium bromide

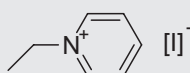


CAS RN<sup>®</sup> : 1906-79-2  
 分子式 : C<sub>7</sub>H<sub>10</sub>BrN  
 分子量 : 188.1

120 °C

49515-84	ILT	IL-0171-HP	99%	25 g	12,000
49515-85	ILT	IL-0171-HP	99%	100 g	36,000

### 1-Ethylpyridinium iodide

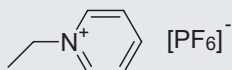


CAS RN<sup>®</sup> : 872-90-2  
 分子式 : C<sub>7</sub>H<sub>10</sub>I  
 分子量 : 235.1

97 °C

49515-88	ILT	IL-0173-HP	98%	25 g	46,000
49515-89	ILT	IL-0173-HP	98%	100 g	81,000

### 1-Ethylpyridinium hexafluorophosphate

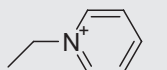


CAS RN<sup>®</sup> : 103173-73-5  
 分子式 : C<sub>7</sub>H<sub>10</sub>F<sub>6</sub>NP  
 分子量 : 253.1

106 °C

49515-86	ILT	IL-0172-HP	99%	25 g	55,000
49515-87	ILT	IL-0172-HP	99%	100 g	97,000

### 1-Ethylpyridinium bis(trifluoromethylsulfonyl)imide

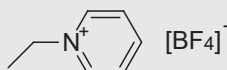


CAS RN<sup>®</sup> : 712354-97-7  
 分子式 : C<sub>9</sub>H<sub>10</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 388.3

46 °C

49515-82	ILT	IL-0211-HP	99%	25 g	39,000
49515-83	ILT	IL-0211-HP	99%	100 g	88,000

### 1-Ethylpyridinium tetrafluoroborate

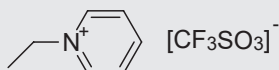


CAS RN<sup>®</sup> : 350-48-1  
 分子式 : C<sub>7</sub>H<sub>10</sub>BF<sub>4</sub>N  
 分子量 : 195.0

46 °C

49515-90	ILT	IL-0107-HP	> 98%	25 g	64,000
49515-91	ILT	IL-0107-HP	> 98%	100 g	114,000

### 1-Ethylpyridinium triflate

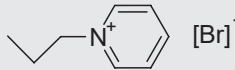


CAS RN<sup>®</sup> : 3878-80-6  
 分子式 : C<sub>8</sub>H<sub>10</sub>F<sub>3</sub>NO<sub>3</sub>S  
 分子量 : 257.2

69 cP (25 °C)    d 1.40 (24 °C)    4.34 mS/cm (24 °C)

49515-92	ILT	IL-0186-HP	99%	25 g	69,000
49515-93	ILT	IL-0186-HP	99%	100 g	123,000

### 1-Propylpyridinium bromide



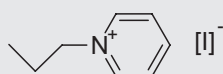
CAS RN<sup>®</sup> : 873-71-2  
 分子式 : C<sub>8</sub>H<sub>12</sub>BrN  
 分子量 : 202.1

73 °C

49518-45	ILT	IL-0224-HP	99%	25 g	38,000
49518-46	ILT	IL-0224-HP	99%	100 g	68,000

# Pyridinium based ionic liquids

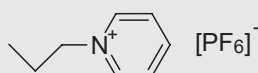
## 1-Propylpyridinium iodide



CAS RN<sup>®</sup> : 39868-02-5  
分子式 : C<sub>8</sub>H<sub>12</sub>IN  
分子量 : 249.1

49519-11	ILT	IL-0253-HP	> 98%	25 g	47,000
49519-12	ILT	IL-0253-HP	> 98%	100 g	82,000

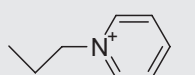
## 1-Propylpyridinium hexafluorophosphate



CAS RN<sup>®</sup> : 1242154-97-7  
分子式 : C<sub>8</sub>H<sub>12</sub>F<sub>6</sub>NP  
分子量 : 267.2

49519-07	ILT	IL-0251-HP	99%	25 g	36,000
49519-08	ILT	IL-0251-HP	99%	100 g	66,000

## 1-Propylpyridinium bis(trifluoromethylsulfonyl)imide

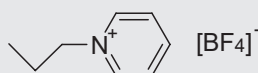


53 cP (25 °C)    d 1.45 (22 °C)

CAS RN<sup>®</sup> : 1104525-90-7  
分子式 : C<sub>10</sub>H<sub>12</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 402.3

49515-94	ILT	IL-0212-HP	99%	25 g	41,000
49515-95	ILT	IL-0212-HP	99%	100 g	94,000

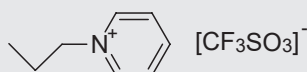
## 1-Propylpyridinium tetrafluoroborate



CAS RN<sup>®</sup> : 239084-00-5  
分子式 : C<sub>8</sub>H<sub>12</sub>BF<sub>4</sub>N  
分子量 : 209.0

49519-09	ILT	IL-0252-HP	> 98%	25 g	47,000
49519-10	ILT	IL-0252-HP	> 98%	100 g	82,000

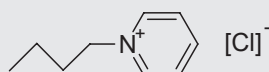
## 1-Propylpyridinium triflate



CAS RN<sup>®</sup> : 1242154-93-3  
分子式 : C<sub>9</sub>H<sub>12</sub>F<sub>3</sub>NO<sub>3</sub>S  
分子量 : 271.3

49519-05	ILT	IL-0250-HP	99%	25 g	118,000
49519-06	ILT	IL-0250-HP	99%	100 g	212,000

## 1-Butylpyridinium chloride

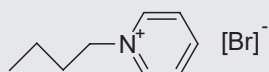


131 °C

CAS RN<sup>®</sup> : 1124-64-7  
分子式 : C<sub>9</sub>H<sub>14</sub>ClN  
分子量 : 171.7

49516-02	ILT	IL-0087-HP	99%	25 g	32,000
49516-03	ILT	IL-0087-HP	99%	100 g	78,000
49503-56	M	4.90042.0025	≥ 98%	25 g	6,300
49503-57	M	4.90042.0100	≥ 98%	100 g	18,800

## 1-Butylpyridinium bromide



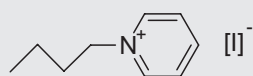
98 °C

CAS RN<sup>®</sup> : 874-80-6  
分子式 : C<sub>9</sub>H<sub>14</sub>BrN  
分子量 : 216.1

49516-00	ILT	IL-0086-HP	99%	25 g	36,000
49516-01	ILT	IL-0086-HP	99%	100 g	64,000

# Pyridinium based ionic liquids

## 1-Butylpyridinium iodide



74 °C

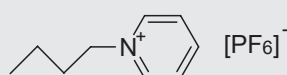
CAS RN<sup>®</sup> : 874-81-7

分子式 : C<sub>9</sub>H<sub>14</sub>IN

分子量 : 263.1

49516-06	ILT	IL-0176-HP	98%	25 g	47,000
49516-07	ILT	IL-0176-HP	98%	100 g	82,000

## 1-Butylpyridinium hexafluorophosphate



75-80 °C

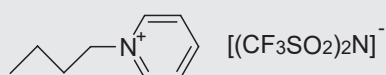
CAS RN<sup>®</sup> : 186088-50-6

分子式 : C<sub>9</sub>H<sub>14</sub>NPF<sub>6</sub>

分子量 : 281.2

49516-04	ILT	IL-0088-HP	99%	25 g	28,000
49516-05	ILT	IL-0088-HP	99%	100 g	61,000
35419-1A	ACR	35419-0250		25 g	39,200

## 1-Butylpyridinium bis(trifluoromethylsulfonyl)imide



59 cP (25 °C)

d 1.45 (23 °C)

1.54 mS/cm (25 °C)

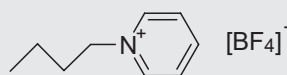
CAS RN<sup>®</sup> : 187863-42-9

分子式 : C<sub>11</sub>H<sub>14</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 416.4

49515-96	ILT	IL-0213-HP	99%	25 g	31,000
49515-97	ILT	IL-0213-HP	99%	100 g	71,000

## 1-Butylpyridinium tetrafluoroborate



203 cP (20 °C)

d 1.22 (22 °C)

1.94 mS/cm (23 °C)

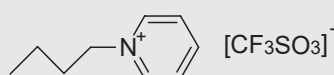
CAS RN<sup>®</sup> : 203389-28-0

分子式 : C<sub>9</sub>H<sub>14</sub>NBF<sub>4</sub>

分子量 : 223.0

49516-08	ILT	IL-0089-HP	99%	25 g	37,000
49516-09	ILT	IL-0089-HP	99%	100 g	66,000
35423-1A	ACR	35423-0050		5 g	59,200

## 1-Butylpyridinium triflate



36 °C

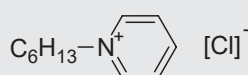
CAS RN<sup>®</sup> : 390423-43-5

分子式 : C<sub>10</sub>H<sub>14</sub>F<sub>3</sub>NO<sub>3</sub>S

分子量 : 285.3

49516-10	ILT	IL-0182-HP	99%	25 g	116,000
49516-11	ILT	IL-0182-HP	99%	100 g	206,000

## 1-Hexylpyridinium chloride



4322 cP (25 °C)

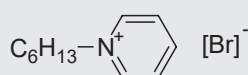
CAS RN<sup>®</sup> : 6220-15-1

分子式 : C<sub>11</sub>H<sub>18</sub>ClN

分子量 : 199.7

49516-14	ILT	IL-0131-HP	> 98%	25 g	87,000
49516-15	ILT	IL-0131-HP	> 98%	100 g	154,000
35416-1A	ACR	35416-0250		25 g	28,800

## 1-Hexylpyridinium bromide



60-70 °C

CAS RN<sup>®</sup> : 74440-81-6

分子式 : C<sub>11</sub>H<sub>18</sub>BrN

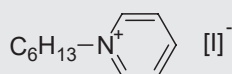
分子量 : 244.2

49516-12	ILT	IL-0130-HP	99%	25 g	47,000
49516-13	ILT	IL-0130-HP	99%	100 g	83,000



# Pyridinium based ionic liquids

## 1-Hexylpyridinium iodide



CAS RN® : 7324-00-7

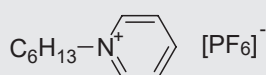
分子式 : C<sub>11</sub>H<sub>18</sub>I<sub>N</sub>

分子量 : 291.2

59 °C

49516-18	ILT	IL-0177-HP	98%	25 g	45,000
49516-19	ILT	IL-0177-HP	98%	100 g	95,000

## 1-Hexylpyridinium hexafluorophosphate



CAS RN® : 797789-00-5

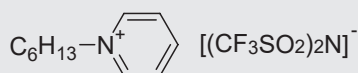
分子式 : C<sub>11</sub>H<sub>18</sub>NPF<sub>6</sub>

分子量 : 309.2

50 °C

49516-16	ILT	IL-0114-HP	99%	25 g	41,000
49516-17	ILT	IL-0114-HP	99%	100 g	73,000
35420-1A	ACR	35420-0250		25 g	39,200

## 1-Hexylpyridinium bis(trifluoromethylsulfonyl)imide



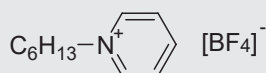
CAS RN® : 460983-97-5

分子式 : C<sub>16</sub>H<sub>18</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 444.4

49529-17	ILT	IL-0330-HP	99%	25 g	82,000
----------	-----	------------	-----	------	--------

## 1-Hexylpyridinium tetrafluoroborate



CAS RN® : 474368-70-2

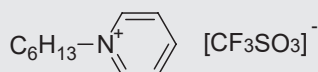
分子式 : C<sub>11</sub>H<sub>18</sub>NBF<sub>4</sub>

分子量 : 251.1

460 cP (18 °C)    d 1.16 (23 °C)    0.90 mS/cm (30 °C)

49516-20	ILT	IL-0108-HP	99%	25 g	42,000
49516-21	ILT	IL-0108-HP	99%	100 g	74,000

## 1-Hexylpyridinium triflate



CAS RN® : 623167-81-7

分子式 : C<sub>12</sub>H<sub>18</sub>F<sub>3</sub>NO<sub>3</sub>S

分子量 : 313.3

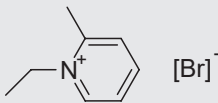
63 °C

49516-22	ILT	IL-0181-HP	98%	25 g	107,000
49516-23	ILT	IL-0181-HP	98%	100 g	189,000

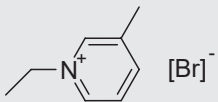
# Pyridinium based ionic liquids

## Methyl-1-alkylpyridinium

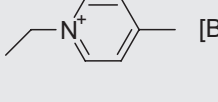
### 1-Ethyl-2-methylpyridinium bromide

 <p>120 °C</p>	CAS RN® : 32354-50-7	49518-47	ILT	IL-0225-HP	99%	25 g	27,000
	分子式 : C <sub>8</sub> H <sub>12</sub> BrN 分子量 : 202.1	49518-48	ILT	IL-0225-HP	99%	100 g	49,000

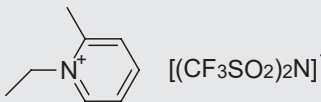
### 1-Ethyl-3-methylpyridinium bromide

	CAS RN® : 54778-76-6	49518-49	ILT	IL-0226-HP	99%	25 g	27,000
	分子式 : C <sub>8</sub> H <sub>12</sub> BrN 分子量 : 202.1	49518-50	ILT	IL-0226-HP	99%	100 g	49,000

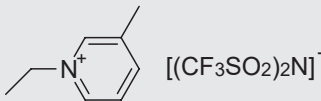
### 1-Ethyl-4-methylpyridinium bromide

 <p>140 °C</p>	CAS RN® : 32353-49-4	49518-51	ILT	IL-0227-HP	99%	25 g	27,000
	分子式 : C <sub>8</sub> H <sub>12</sub> BrN 分子量 : 202.1	49518-52	ILT	IL-0227-HP	99%	100 g	49,000

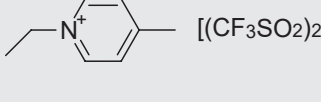
### 1-Ethyl-2-methylpyridinium bis(trifluoromethylsulfonyl)imide

 <p>75 cP (25 °C)    d 1.51 (27 °C)    3.71 mS/cm (30 °C)</p>	CAS RN® : 712354-99-9	49518-97	ILT	IL-0247-HP	99%	25 g	36,000
	分子式 : C <sub>10</sub> H <sub>12</sub> F <sub>6</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 402.3	49519-00	ILT	IL-0247-HP	99%	100 g	84,000

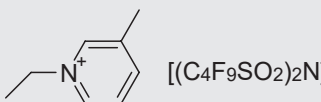
### 1-Ethyl-3-methylpyridinium bis(trifluoromethylsulfonyl)imide

 <p>37 cP (25 °C)    d 1.48 (26 °C)    7.47 mS/cm (30 °C)</p>	CAS RN® : 841251-37-4	49516-24	ILT	IL-0214-HP	99%	25 g	27,000
	分子式 : C <sub>10</sub> H <sub>12</sub> F <sub>6</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 402.3	49516-25	ILT	IL-0214-HP	99%	100 g	62,000

### 1-Ethyl-4-methylpyridinium bis(trifluoromethylsulfonyl)imide

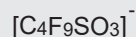
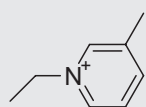
 <p>32 cP (25 °C)    d 1.49 (21 °C)    3.42 mS/cm (25 °C)</p>	CAS RN® : 712355-03-8	49516-26	ILT	IL-0217-HP	99%	25 g	27,000
	分子式 : C <sub>10</sub> H <sub>12</sub> F <sub>6</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 402.3	49516-27	ILT	IL-0217-HP	99%	100 g	61,000

### 1-Ethyl-3-methylpyridinium bis(nonafluorobutanesulfonyl)imide (※当製品は在庫限りで終売となります)

	分子式 : C <sub>16</sub> H <sub>12</sub> F <sub>18</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 702.4	14545-45				10 mL	29,000

# Pyridinium based ionic liquids

## 1-Ethyl-3-methylpyridinium perfluorobutanesulfonate



CAS RN<sup>®</sup> : 1015420-87-7

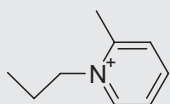
分子式 : C<sub>12</sub>H<sub>12</sub>F<sub>9</sub>NO<sub>3</sub>S

分子量 : 421.3

195 cP (25 °C)    d 1.52 (23 °C)    1.53 mS/cm (30 °C)

49520-18	ILT	IL-0313-HP	> 99%	25 g	60,000
49520-19	ILT	IL-0313-HP	> 99%	100 g	107,000
49507-74	M	4.90295.0025	≥ 98%	25 g	35,400
49507-75	M	4.90295.0100	≥ 98%	100 g	78,400

## 1-Propyl-2-methylpyridinium bromide



CAS RN<sup>®</sup> : 5411-09-6

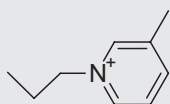
分子式 : C<sub>9</sub>H<sub>14</sub>BrN

分子量 : 216.1

106 °C

49518-39	ILT	IL-0221-HP	99%	25 g	27,000
49518-40	ILT	IL-0221-HP	99%	100 g	49,000

## 1-Propyl-3-methylpyridinium bromide



CAS RN<sup>®</sup> : 67021-55-0

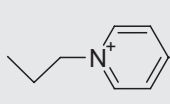
分子式 : C<sub>9</sub>H<sub>14</sub>BrN

分子量 : 216.1

73 °C

49518-41	ILT	IL-0222-HP	99%	25 g	27,000
49518-42	ILT	IL-0222-HP	99%	100 g	49,000

## 1-Propyl-4-methylpyridinium bromide



CAS RN<sup>®</sup> : 70850-58-7

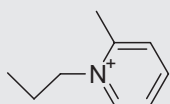
分子式 : C<sub>9</sub>H<sub>14</sub>BrN

分子量 : 216.1

55 °C

49518-43	ILT	IL-0223-HP	99%	25 g	27,000
49518-44	ILT	IL-0223-HP	99%	100 g	49,000

## 1-Propyl-2-methylpyridinium bis(trifluoromethylsulfonyl)imide

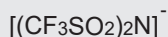
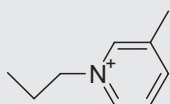


分子式 : C<sub>11</sub>H<sub>14</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 416.4

49519-01	ILT	IL-0248-HP	99%	25 g	32,000
49519-02	ILT	IL-0248-HP	99%	100 g	73,000

## 1-Propyl-3-methylpyridinium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 817575-06-7

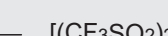
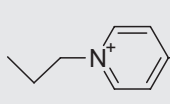
分子式 : C<sub>11</sub>H<sub>14</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 416.4

53 cP (25 °C)    d 1.45 (22 °C)

49516-28	ILT	IL-0215-HP	99%	25 g	33,000
49516-30	ILT	IL-0215-HP	99%	100 g	73,000

## 1-Propyl-4-methylpyridinium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 1456878-01-5

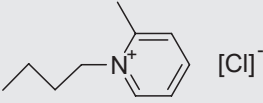
分子式 : C<sub>11</sub>H<sub>14</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 416.4

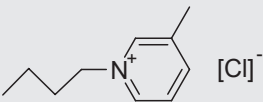
49516-31	ILT	IL-0218-HP	99%	25 g	33,000
49516-32	ILT	IL-0218-HP	99%	100 g	77,000

# Pyridinium based ionic liquids

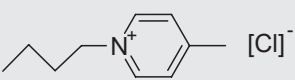
## 1-Butyl-2-methylpyridinium chloride

 <p>CAS RN<sup>®</sup> : 112400-85-8 分子式 : C<sub>10</sub>H<sub>16</sub>ClN 分子量 : 185.7</p> <p>147 °C                      d 1.41 (22 °C)</p>	49516-35	ILT	IL-0129-HP	99%	25 g	55,000
	49516-36	ILT	IL-0129-HP	99%	100 g	98,000

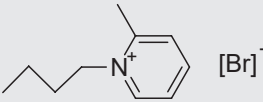
## 1-Butyl-3-methylpyridinium chloride

 <p>CAS RN<sup>®</sup> : 125652-55-3 分子式 : C<sub>10</sub>H<sub>16</sub>ClN 分子量 : 185.7</p> <p>112 °C</p>	49516-49	ILT	IL-0079-HP	99%	25 g	44,000
	49516-50	ILT	IL-0079-HP	99%	100 g	77,000

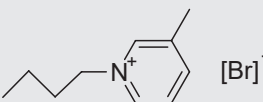
## 1-Butyl-4-methylpyridinium chloride

 <p>CAS RN<sup>®</sup> : 112400-86-9 分子式 : C<sub>10</sub>H<sub>16</sub>ClN 分子量 : 185.7</p> <p>162 °C</p>	49516-63	ILT	IL-0083-HP	99%	25 g	42,000
	49516-64	ILT	IL-0083-HP	99%	100 g	75,000

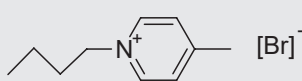
## 1-Butyl-2-methylpyridinium bromide

 <p>CAS RN<sup>®</sup> : 26576-84-1 分子式 : C<sub>10</sub>H<sub>16</sub>BrN 分子量 : 230.1</p> <p>152 °C</p>	49516-33	ILT	IL-0128-HP	99%	25 g	48,000
	49516-34	ILT	IL-0128-HP	99%	100 g	84,000

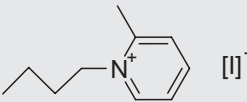
## 1-Butyl-3-methylpyridinium bromide

 <p>CAS RN<sup>®</sup> : 26576-85-2 分子式 : C<sub>10</sub>H<sub>16</sub>BrN 分子量 : 230.1</p> <p>79 °C</p>	49516-47	ILT	IL-0078-HP	99%	25 g	36,000
	49516-48	ILT	IL-0078-HP	99%	100 g	64,000

## 1-Butyl-4-methylpyridinium bromide

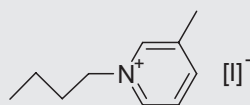
 <p>CAS RN<sup>®</sup> : 65350-59-6 分子式 : C<sub>10</sub>H<sub>16</sub>BrN 分子量 : 230.1</p> <p>115-120 °C</p>	49516-61	ILT	IL-0082-HP	99%	25 g	35,000
	49516-62	ILT	IL-0082-HP	99%	100 g	61,000

## 1-Butyl-2-methylpyridinium iodide

 <p>CAS RN<sup>®</sup> : 13311-31-4 分子式 : C<sub>10</sub>H<sub>16</sub>I N 分子量 : 277.1</p> <p>114 °C</p>	49516-39	ILT	IL-0183-HP	98%	25 g	45,000
	49516-40	ILT	IL-0183-HP	98%	100 g	79,000

# Pyridinium based ionic liquids

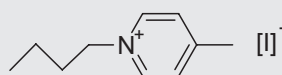
## 1-Butyl-3-methylpyridinium iodide



CAS RN<sup>®</sup> : 258273-67-5  
 分子式 : C<sub>10</sub>H<sub>16</sub>IN  
 分子量 : 277.1

49516-53	ILT	IL-0184-HP	98%	25 g	45,000
49516-54	ILT	IL-0184-HP	98%	100 g	80,000

## 1-Butyl-4-methylpyridinium iodide

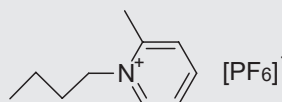


CAS RN<sup>®</sup> : 32353-64-3  
 分子式 : C<sub>10</sub>H<sub>16</sub>IN  
 分子量 : 277.1

60 °C

49516-67	ILT	IL-0185-HP	98%	25 g	42,000
49516-68	ILT	IL-0185-HP	98%	100 g	75,000

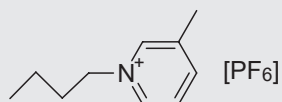
## 1-Butyl-2-methylpyridinium hexafluorophosphate



CAS RN<sup>®</sup> : 1268986-44-2  
 分子式 : C<sub>10</sub>H<sub>16</sub>F<sub>6</sub>NP  
 分子量 : 295.2

49516-37	ILT	IL-0127-HP	99%	25 g	45,000
49516-38	ILT	IL-0127-HP	99%	100 g	79,000

## 1-Butyl-3-methylpyridinium hexafluorophosphate

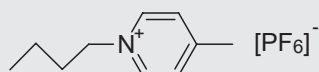


CAS RN<sup>®</sup> : 845835-03-2  
 分子式 : C<sub>10</sub>H<sub>16</sub>F<sub>6</sub>NP  
 分子量 : 295.2

52 °C

49516-51	ILT	IL-0080-HP	99%	25 g	31,000
49516-52	ILT	IL-0080-HP	99%	100 g	55,000

## 1-Butyl-4-methylpyridinium hexafluorophosphate

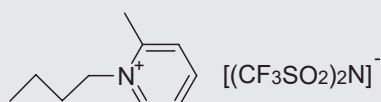


CAS RN<sup>®</sup> : 401788-99-6  
 分子式 : C<sub>10</sub>H<sub>16</sub>F<sub>6</sub>NP  
 分子量 : 295.2

42-43 °C

49516-65	ILT	IL-0084-HP	99%	25 g	36,000
49516-66	ILT	IL-0084-HP	99%	100 g	63,000

## 1-Butyl-2-methylpyridinium bis(trifluoromethylsulfonyl)imide

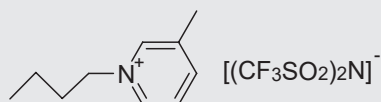


CAS RN<sup>®</sup> : 384347-09-5  
 分子式 : C<sub>12</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 430.4

92 cP (25 °C)    d 1.43 (21 °C)    1.03 mS/cm (25 °C)

49518-53	ILT	IL-0228-HP	99%	25 g	39,000
49518-54	ILT	IL-0228-HP	99%	100 g	89,000

## 1-Butyl-3-methylpyridinium bis(trifluoromethylsulfonyl)imide



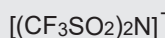
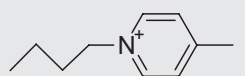
CAS RN<sup>®</sup> : 344790-86-9  
 分子式 : C<sub>12</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 430.4

3.29 mS/cm (30 °C)

49516-45	ILT	IL-0216-HP	99%	25 g	29,000
49516-46	ILT	IL-0216-HP	99%	100 g	67,000

# Pyridinium based ionic liquids

## 1-Butyl-4-methylpyridinium bis(trifluoromethylsulfonyl)imide

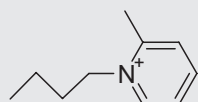


CAS RN<sup>®</sup> : 475681-62-0  
 分子式 : C<sub>12</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 分子量 : 430.4

10 °C      54 cP (25 °C)      d 1.41 (22 °C)      4.32 mS/cm (30 °C)

49516-59	ILT	IL-0219-HP	99%	25 g	32,000
49516-60	ILT	IL-0219-HP	99%	100 g	73,000

## 1-Butyl-2-methylpyridinium tetrafluoroborate

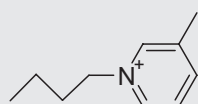


CAS RN<sup>®</sup> : 286453-46-1  
 分子式 : C<sub>10</sub>H<sub>16</sub>BF<sub>4</sub>N  
 分子量 : 237.0

258 cP (20 °C)      d 1.20 (25 °C)      1.83 mS/cm (23 °C)

49516-41	ILT	IL-0111-HP	99%	25 g	40,000
49516-42	ILT	IL-0111-HP	99%	100 g	71,000

## 1-Butyl-3-methylpyridinium tetrafluoroborate

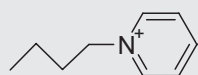


CAS RN<sup>®</sup> : 597581-48-1  
 分子式 : C<sub>10</sub>H<sub>16</sub>BF<sub>4</sub>N  
 分子量 : 237.0

176 cP (25 °C)      d 1.18 (25 °C)      1.41 mS/cm (23 °C)

49516-55	ILT	IL-0081-HP	99%	25 g	34,000
49516-56	ILT	IL-0081-HP	99%	100 g	60,000

## 1-Butyl-4-methylpyridinium tetrafluoroborate

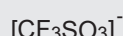
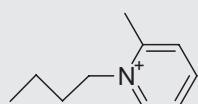


CAS RN<sup>®</sup> : 343952-33-0  
 分子式 : C<sub>10</sub>H<sub>16</sub>BF<sub>4</sub>N  
 分子量 : 237.0

1.81 mS/cm

49516-69	ILT	IL-0085-HP	99%	25 g	34,000
49516-70	ILT	IL-0085-HP	99%	100 g	59,000

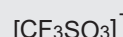
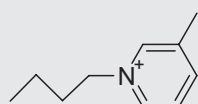
## 1-Butyl-2-methylpyridinium triflate



CAS RN<sup>®</sup> : 1770850-20-8  
 分子式 : C<sub>11</sub>H<sub>16</sub>F<sub>3</sub>NO<sub>3</sub>S  
 分子量 : 299.3

49516-43	ILT	IL-0178-HP	99%	25 g	84,000
49516-44	ILT	IL-0178-HP	99%	100 g	201,000

## 1-Butyl-3-methylpyridinium triflate

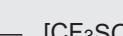
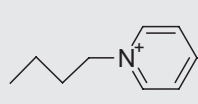


CAS RN<sup>®</sup> : 857841-32-8  
 分子式 : C<sub>11</sub>H<sub>16</sub>F<sub>3</sub>NO<sub>3</sub>S  
 分子量 : 299.3

118 cP (25 °C)      d 1.28 (25 °C)      2.35 mS/cm (30 °C)

49516-57	ILT	IL-0179-HP	99%	25 g	107,000
49516-58	ILT	IL-0179-HP	99%	100 g	190,000

## 1-Butyl-4-methylpyridinium triflate



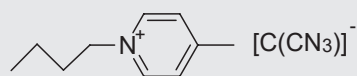
CAS RN<sup>®</sup> : 882172-79-4  
 分子式 : C<sub>11</sub>H<sub>16</sub>F<sub>3</sub>NO<sub>3</sub>S  
 分子量 : 299.3

136 cP (25 °C)      d 1.28 (25 °C)      2.41 mS/cm (30 °C)

49516-71	ILT	IL-0180-HP	99%	25 g	107,000
49516-72	ILT	IL-0180-HP	99%	100 g	189,000

# Pyridinium based ionic liquids

## 1-Butyl-4-methylpyridinium tricyanomethanide



CAS RN® : 1312925-66-8

分子式 : C<sub>14</sub>H<sub>16</sub>N<sub>4</sub>

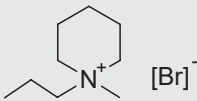
分子量 : 240.3

49527-49	ILT	IL-0319-HP	98%	25 g	28,000
49527-50	ILT	IL-0319-HP	98%	100 g	49,000

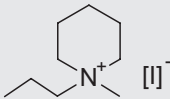
# Piperidinium based ionic liquids

## 1-Alkyl-1-methylpiperidinium

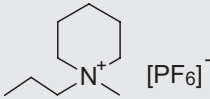
### 1-Methyl-1-propylpiperidinium bromide

	CAS RN® : 88840-42-0 分子式 : C <sub>9</sub> H <sub>20</sub> BrN 分子量 : 222.2	49516-97	ILT	IL-0090-HP	99%	25 g	32,000
		49517-00	ILT	IL-0090-HP	99%	100 g	41,000
247 °C							

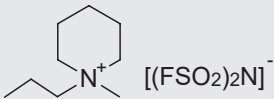
### 1-Methyl-1-propylpiperidinium iodide

	CAS RN® : 17874-63-4 分子式 : C <sub>9</sub> H <sub>20</sub> IN 分子量 : 269.2	49517-03	ILT	IL-0170-HP	> 98%	25 g	50,000
		49517-04	ILT	IL-0170-HP	> 98%	100 g	100,000
190 °C							

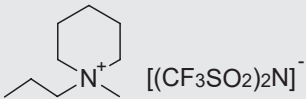
### 1-Methyl-1-propylpiperidinium hexafluorophosphate

	CAS RN® : 1426821-81-9 分子式 : C <sub>9</sub> H <sub>20</sub> F <sub>6</sub> NP 分子量 : 287.2	49517-01	ILT	IL-0149-HP	99%	25 g	39,000
		49517-02	ILT	IL-0149-HP	99%	100 g	70,000

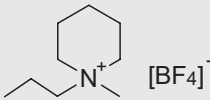
### 1-Methyl-1-propylpiperidinium bis(fluorosulfonyl)imide

	CAS RN® : 911303-46-3 分子式 : C <sub>9</sub> H <sub>20</sub> F <sub>2</sub> O <sub>4</sub> S <sub>2</sub> N <sub>2</sub> 分子量 : 322.4	49210-09	SOLVI	PI0333A10	99.9%	10 g	81,000

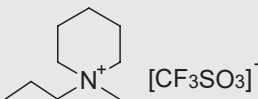
### N-Methyl-N-propylpiperidinium bis(trifluoromethanesulfonyl)imide

	CAS RN® : 608140-12-1 分子式 : C <sub>11</sub> H <sub>20</sub> F <sub>6</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 422.4	26039-53				5 mL	9,500
		26039-33				25 mL	33,000
		49516-95	ILT	IL-0045-HP	99%	25 g	19,000
		49516-96	ILT	IL-0045-HP	99%	100 g	42,000
		49528-10	ILT	IL-0045-UP	99.5%	25 g	32,000
176 cP (25 °C)    d 1.41 (23 °C)    2.12 mS/cm (30 °C)							

### 1-Methyl-1-propylpiperidinium tetrafluoroborate

	CAS RN® : 879866-95-2 分子式 : C <sub>9</sub> H <sub>20</sub> BF <sub>4</sub> N 分子量 : 229.1	49517-05	ILT	IL-0150-HP	99%	25 g	41,000
		49517-06	ILT	IL-0150-HP	99%	100 g	73,000
105 °C							

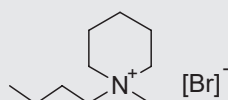
### 1-Methyl-1-propylpiperidinium triflate

	CAS RN® : 1221445-34-6 分子式 : C <sub>10</sub> H <sub>20</sub> F <sub>3</sub> NO <sub>3</sub> S 分子量 : 291.3	49517-07	ILT	IL-0175-HP	99%	25 g	66,000
		49517-08	ILT	IL-0175-HP	99%	100 g	133,000



# Piperidinium based ionic liquids

## 1-Butyl-1-methylpiperidinium bromide

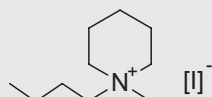


231 °C

CAS RN® : 94280-72-5  
分子式 : C<sub>10</sub>H<sub>22</sub>BrN  
分子量 : 236.2

49517-11	ILT	IL-0153-HP	99%	25 g	27,000
49517-12	ILT	IL-0153-HP	99%	100 g	35,000

## 1-Butyl-1-methylpiperidinium iodide

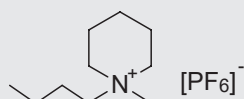


192 °C

CAS RN® : 37971-78-1  
分子式 : C<sub>10</sub>H<sub>22</sub>I  
分子量 : 283.2

49517-15	ILT	IL-0169-HP	> 98%	25 g	52,000
49517-16	ILT	IL-0169-HP	> 98%	100 g	105,000

## 1-Butyl-1-methylpiperidinium hexafluorophosphate

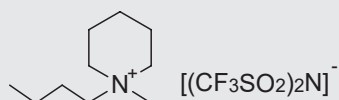


183 cP (20 °C)    d 1.38 (23 °C)    0.84 mS/cm (25 °C)

CAS RN® : 1257647-66-7  
分子式 : C<sub>10</sub>H<sub>22</sub>F<sub>6</sub>NP  
分子量 : 301.3

49517-13	ILT	IL-0156-HP	99%	25 g	48,000
49517-14	ILT	IL-0156-HP	99%	100 g	84,000

## 1-Butyl-1-methylpiperidinium bis(trifluoromethylsulfonyl)imide

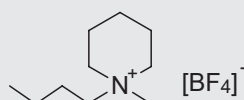


183 cP (20 °C)    d 1.38 (23 °C)    0.84 mS/cm (25 °C)

CAS RN® : 623580-02-9  
分子式 : C<sub>12</sub>H<sub>22</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
分子量 : 436.4

49517-09	ILT	IL-0154-HP	99%	25 g	20,000
49517-10	ILT	IL-0154-HP	99%	100 g	51,000

## 1-Butyl-1-methylpiperidinium tetrafluoroborate

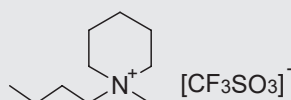


149 °C

CAS RN® : 886439-34-5  
分子式 : C<sub>10</sub>H<sub>22</sub>BF<sub>4</sub>N  
分子量 : 243.1

49517-17	ILT	IL-0152-HP	99%	25 g	51,000
49517-18	ILT	IL-0152-HP	99%	100 g	90,000

## 1-Butyl-1-methylpiperidinium triflate



CAS RN® : 1357500-93-6  
分子式 : C<sub>11</sub>H<sub>22</sub>F<sub>3</sub>NO<sub>3</sub>S  
分子量 : 305.4

49517-19	ILT	IL-0174-HP	99%	25 g	63,000
49517-20	ILT	IL-0174-HP	99%	100 g	127,000

# Ammonium based ionic liquids

## Alkylammonium

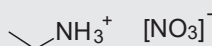
### Methylammonium nitrate



CAS RN<sup>®</sup> : 22113-87-7  
 分子式 : CH<sub>6</sub>N<sub>2</sub>O<sub>3</sub>  
 分子量 : 94.1

49518-19	ILT	IL-0124-SG	> 97%	25 g	23,000
49518-20	ILT	IL-0124-SG	> 97%	100 g	50,000

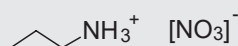
### Ethylammonium nitrate



CAS RN<sup>®</sup> : 22113-86-6  
 分子式 : C<sub>2</sub>H<sub>9</sub>N<sub>2</sub>O<sub>3</sub>  
 分子量 : 109.1

49518-06	ILT	IL-0043-SG	> 97%	25 g	15,000
49518-07	ILT	IL-0043-SG	> 97%	100 g	33,000

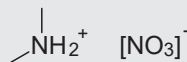
### Propylammonium nitrate



CAS RN<sup>®</sup> : 22113-88-8  
 分子式 : C<sub>3</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub>  
 分子量 : 122.1

49518-21	ILT	IL-0125-SG	> 97%	25 g	23,000
49518-22	ILT	IL-0125-SG	> 97%	100 g	51,000

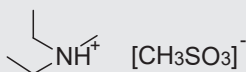
### Dimethylammonium nitrate



CAS RN<sup>®</sup> : 30781-73-8  
 分子式 : C<sub>2</sub>H<sub>8</sub>N<sub>2</sub>O<sub>3</sub>  
 分子量 : 108.1

49518-23	ILT	IL-0126-SG	> 97%	25 g	23,000
49518-24	ILT	IL-0126-SG	> 97%	100 g	51,000

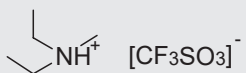
### Diethylmethylammonium methanesulfonate



CAS RN<sup>®</sup> : 945715-44-6  
 分子式 : C<sub>6</sub>H<sub>17</sub>NO<sub>3</sub>S  
 分子量 : 183.3

49527-61	ILT	IL-0325-HP	98%	25 g	13,000
49527-62	ILT	IL-0325-HP	98%	100 g	28,000

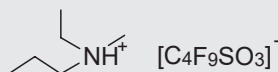
### Diethylmethylammonium trifluoromethanesulfonate



CAS RN<sup>®</sup> : 945715-39-9  
 分子式 : C<sub>6</sub>H<sub>14</sub>F<sub>3</sub>NO<sub>3</sub>S  
 分子量 : 237.2

49527-63	ILT	IL-0326-HP	98%	25 g	19,000
49527-64	ILT	IL-0326-HP	98%	100 g	43,000

### N-Ethyl-N-methyl-N-propylammonium perfluorobutanesulfonate

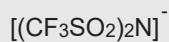
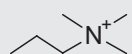


CAS RN<sup>®</sup> : 1186599-90-5  
 分子式 : C<sub>10</sub>H<sub>16</sub>F<sub>9</sub>NO<sub>3</sub>S  
 分子量 : 401.1

49529-23	ILT	IL-0338-HP	99%	25 g	58,000
----------	-----	------------	-----	------	--------

# Ammonium based ionic liquids

## *N,N,N*-Trimethyl-*N*-propylammonium bis(trifluoromethanesulfonyl)imide



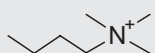
CAS RN® : 268536-05-6

分子式 : C<sub>8</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 382.3

41110-53				5 mL	9,500
41110-33				25 mL	33,000

## *N*-Trimethyl-*N*-butylammonium bromide



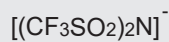
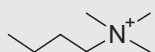
CAS RN® : 2650-51-3

分子式 : C<sub>7</sub>H<sub>18</sub>NBr

分子量 : 196.1

49210-13	SOLVI	AM0402C50	99%	50 g	41,000
----------	-------	-----------	-----	------	--------

## Butyltrimethylammonium bis(trifluoromethylsulfonyl)imide



CAS RN® : 258273-75-5

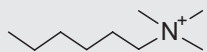
分子式 : C<sub>9</sub>H<sub>18</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 396.4

100 cP (25 °C)    d 1.40 (24 °C)    2.86 mS/cm (30 °C)

49516-81	ILT	IL-0032-HP	99%	25 g	24,000
49516-82	ILT	IL-0032-HP	99%	100 g	57,000
49528-03	ILT	IL-0032-UP	99.5%	25 g	34,000

## *N*-Trimethyl-*N*-hexylammonium bromide



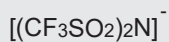
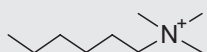
CAS RN® : 2650-53-5

分子式 : C<sub>9</sub>H<sub>22</sub>NBr

分子量 : 224.2

49210-14	SOLVI	AM0602C50	99%	50 g	47,000
----------	-------	-----------	-----	------	--------

## *N*-Trimethyl-*N*-hexylammonium bis(trifluoromethanesulfonyl)imide



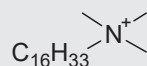
CAS RN® : 210230-43-6

分子式 : C<sub>11</sub>H<sub>22</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 424.4

49210-07	SOLVI	AM0608B50	99.5%	50 g	66,000
----------	-------	-----------	-------	------	--------

## Hexadecyltrimethylammonium bis(trifluoromethylsulfonyl)imide



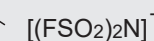
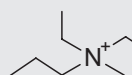
CAS RN® : 1031250-01-7

分子式 : C<sub>21</sub>H<sub>42</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 565.0

49529-14	ILT	IL-0327-HP	99%	25 g	22,000
----------	-----	------------	-----	------	--------

## *N,N*-Diethyl-*N*-methyl-*N*-propylammonium bis(fluorosulfonyl)imide



CAS RN® : 1235234-32-8

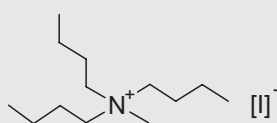
分子式 : C<sub>8</sub>H<sub>20</sub>F<sub>2</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 310.4

49210-08	SOLVI	AMSF2633A10	99.9%	10 g	81,000
----------	-------	-------------	-------	------	--------

# Ammonium based ionic liquids

## *N*-Tributyl-*N*-methylammonium iodide



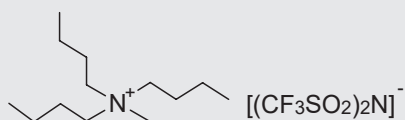
CAS RN<sup>®</sup> : 3085-79-8

分子式 : C<sub>13</sub>H<sub>30</sub>NI

分子量 : 327.3

49210-15 SOLVI AM3406C50 99% 50 g 54,000

## Tributylmethylammonium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 405514-94-5

分子式 : C<sub>15</sub>H<sub>30</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

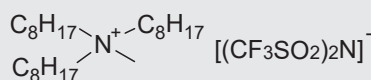
分子量 : 480.5

522 cP (25 °C) d 1.26 (23 °C) 0.48 mS/cm (30 °C)

49516-83 ILT IL-0117-HP 99% 25 g 24,000

49516-84 ILT IL-0117-HP 99% 100 g 68,000

## Methyltrioctylammonium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 375395-33-8

分子式 : C<sub>27</sub>H<sub>54</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

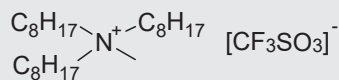
分子量 : 648.9

540 cP (25 °C) d 1.11 (23 °C) 0.046 mS/cm (20 °C)

49516-85 ILT IL-0017-HP 99% 25 g 31,000

49516-86 ILT IL-0017-HP 99% 100 g 76,000

## Methyltrioctylammonium triflate



CAS RN<sup>®</sup> : 121107-18-4

分子式 : C<sub>26</sub>H<sub>54</sub>F<sub>3</sub>NO<sub>3</sub>S

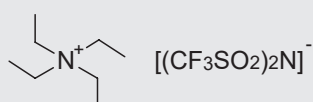
分子量 : 517.8

55-60 °C

49516-87 ILT IL-0118-HP 99% 25 g 34,000

49516-88 ILT IL-0118-HP 99% 100 g 75,000

## Tetraethylammonium bis(trifluoromethylsulfonyl)imide



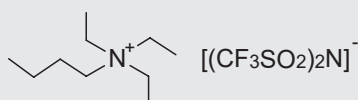
CAS RN<sup>®</sup> : 161401-26-9

分子式 : C<sub>10</sub>H<sub>20</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 410.4

49529-20 ILT IL-0335-HP > 98% 25 g 23,000

## Butyltriethylammonium bis(trifluoromethylsulfonyl)imide



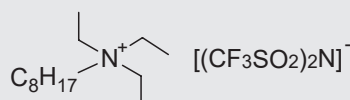
CAS RN<sup>®</sup> : 324574-91-6

分子式 : C<sub>12</sub>H<sub>24</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 438.5

49529-16 ILT IL-0329-HP 99% 25 g 25,000

## Octyltriethylammonium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 210230-48-1

分子式 : C<sub>16</sub>H<sub>32</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

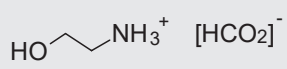
分子量 : 494.6

49529-15 ILT IL-0328-HP > 98% 25 g 28,000

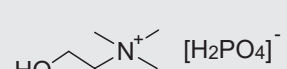
# Ammonium based ionic liquids

## Ammonium [Others]

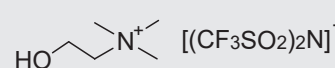
### 2-Hydroxyethylammonium formate

	CAS RN® : 53226-35-0	49516-89	ILT	IL-0034-SG	> 97%	25 g	15,000
	分子式 : C <sub>3</sub> H <sub>9</sub> NO <sub>3</sub> 分子量 : 107.1	49516-90	ILT	IL-0034-SG	> 97%	100 g	32,000
188 cP (25 °C)    d 1.20 (24 °C)    4.40 mS/cm (30 °C)							

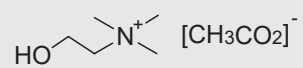
### Choline dihydrogenphosphate

	CAS RN® : 83846-92-8	49516-93	ILT	IL-0042-HP	> 98%	25 g	24,000
	分子式 : C <sub>5</sub> H <sub>16</sub> NPO <sub>5</sub> 分子量 : 201.2	49516-94	ILT	IL-0042-HP	> 98%	100 g	54,000
190 °C		49507-62	M	4.90289.0025		25 g	22,100
		49507-63	M	4.90289.0100		100 g	58,300

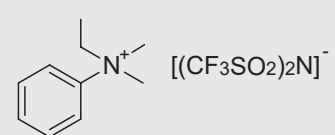
### Choline bis(trifluoromethylsulfonyl)imide

	CAS RN® : 827027-25-8	49516-91	ILT	IL-0110-HP	99%	25 g	28,000
	分子式 : C <sub>7</sub> H <sub>14</sub> F <sub>6</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> 分子量 : 368.3	49516-92	ILT	IL-0110-HP	99%	100 g	62,000
35-37 °C    50 cP (45 °C)    3.98 mS/cm (45 °C)							

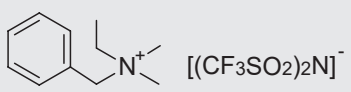
### Choline acetate

	CAS RN® : 14586-35-7	49527-59	ILT	IL-0322-HP	98%	25 g	30,000
	分子式 : C <sub>7</sub> H <sub>17</sub> NO <sub>3</sub> 分子量 : 163.2	49527-60	ILT	IL-0322-HP	98%	100 g	70,000

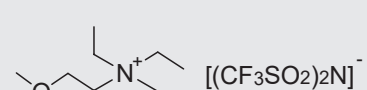
### *N,N*-Dimethyl-*N*-ethyl-*N*-phenethylammonium bis(trifluoromethanesulfonyl)imide

	分子式 : C <sub>14</sub> H <sub>20</sub> F <sub>6</sub> O <sub>4</sub> S <sub>2</sub> N <sub>2</sub> 分子量 : 458.4	49210-06	SOLVI	AMSF1308B50	99.5%	50 g	98,000
---	--	----------	-------	-------------	-------	------	--------

### *N,N*-Dimethyl-*N*-ethyl-*N*-benzylammonium bis(trifluoromethanesulfonyl)imide

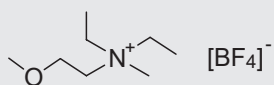
	CAS RN® : 1186103-43-4	49210-05	SOLVI	AMSF1208B50	99.5%	50 g	94,000
	分子式 : C <sub>13</sub> H <sub>18</sub> F <sub>6</sub> O <sub>4</sub> S <sub>2</sub> N <sub>2</sub> 分子量 : 444.4						

### *N,N*-Diethyl-*N*-methyl-*N*-(2-methoxyethyl)ammonium bis(trifluoromethanesulfonyl)imide

	CAS RN® : 464927-84-2	11468-55				5 mL	9,500
	分子式 : C <sub>10</sub> H <sub>20</sub> F <sub>6</sub> N <sub>2</sub> O <sub>5</sub> S <sub>2</sub> 分子量 : 426.4	11468-35				25 mL	32,000
67 cP (25 °C)    d 1.42    2.62 mS/cm		11468-05				500 g	☆
		49528-16	ILT	IL-0116-HP	99%	25 g	73,000

# Ammonium based ionic liquids

## *N,N*-Diethyl-*N*-methyl-*N*-(2-methoxyethyl)ammonium tetrafluoroborate



CAS RN® : 464927-72-8

分子式 : C<sub>8</sub>H<sub>20</sub>NOBF<sub>4</sub>

分子量 : 233.1

9 °C

272 cP (25 °C)

d 1.17

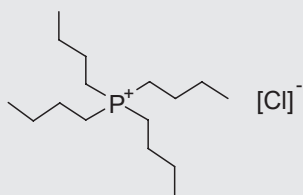
1.24 mS/cm

11469-45				10 mL	6,000
11469-25				100 mL	39,000
11469-05				500 g	☆
49528-19	ILT	IL-0123-HP	99%	25 g	54,000

# Phosphonium based ionic liquids

## Alkylphosphonium

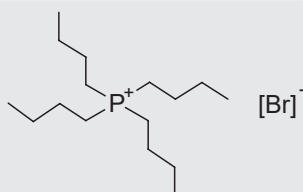
### Tetrabutylphosphonium chloride



CAS RN® : 2304-30-5  
分子式 : C<sub>16</sub>H<sub>36</sub>ClP  
分子量 : 294.9

49517-74	ILT	IN-0015-TG	> 95%	25 g	9,000
49517-75	ILT	IN-0015-TG	> 95%	100 g	22,000

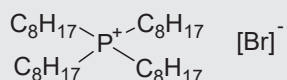
### Tetrabutylphosphonium bromide



CAS RN® : 3115-68-2  
分子式 : C<sub>16</sub>H<sub>36</sub>BrP  
分子量 : 339.3

49517-72	ILT	IN-0014-TG	> 95%	25 g	8,000
49517-73	ILT	IN-0014-TG	> 95%	100 g	21,000

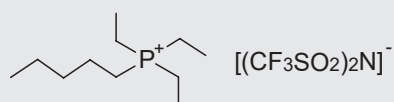
### Tetraoctylphosphonium bromide



CAS RN® : 23906-97-0  
分子式 : C<sub>32</sub>H<sub>68</sub>BrP  
分子量 : 563.8

49517-76	ILT	IN-0016-TG	> 95%	25 g	27,000
49517-77	ILT	IN-0016-TG	> 95%	100 g	72,000

### Triethylpentylphosphonium bis(trifluoromethanesulfonyl)imide

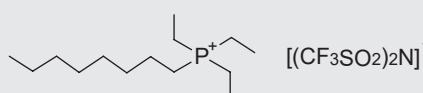


CAS RN® : 1010707-47-7  
分子式 : C<sub>13</sub>H<sub>26</sub>F<sub>6</sub>NO<sub>4</sub>PS<sub>2</sub>  
分子量 : 469.4

17 °C      88 cP      d 1.32      1.70 mS/cm

40334-35				25 mL	34,000
----------	--	--	--	-------	--------

### Triethyloctylphosphonium bis(trifluoromethanesulfonyl)imide

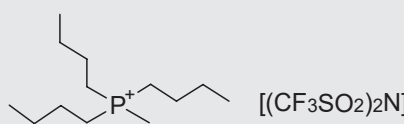


CAS RN® : 1002754-38-2  
分子式 : C<sub>16</sub>H<sub>32</sub>F<sub>6</sub>NO<sub>4</sub>PS<sub>2</sub>  
分子量 : 511.5

< -50 °C (Tg)      129 cP      d 1.26      0.98 mS/cm

40335-35				25 mL	34,000
----------	--	--	--	-------	--------

### Tributylmethylphosphonium bis(trifluoromethanesulfonyl)imide

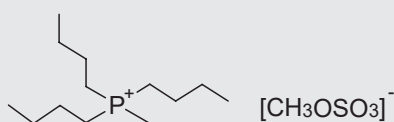


CAS RN® : 324575-10-2  
分子式 : C<sub>15</sub>H<sub>30</sub>F<sub>6</sub>NO<sub>4</sub>PS<sub>2</sub>  
分子量 : 497.5

16 °C      207 cP      d 1.28      0.42 mS/cm

40336-35				25 mL	33,000
49529-33	ILT	IN-0037-HP	> 98%	25 g	43,000

### Tributylmethylphosphonium methylsulfate

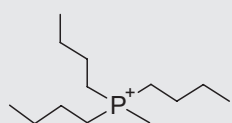


CAS RN® : 69056-62-8  
分子式 : C<sub>14</sub>H<sub>33</sub>O<sub>4</sub>PS  
分子量 : 328.5

49517-70	ILT	IN-0013-TG	> 95%	25 g	22,000
49517-71	ILT	IN-0013-TG	> 95%	100 g	56,000

# Phosphonium based ionic liquids

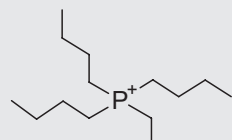
## Tributylmethylphosphonium methylcarbonate



CAS RN® : 120256-45-3  
分子式 : C<sub>15</sub>H<sub>33</sub>O<sub>3</sub>P  
分子量 : 292.2

49529-30    ILT    IN-0030-SG    > 97%    25 g    35,000

## Tributylethylphosphonium diethylphosphate

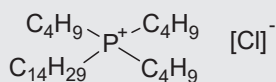


CAS RN® : 20445-94-7  
分子式 : C<sub>18</sub>H<sub>42</sub>O<sub>4</sub>P<sub>2</sub>  
分子量 : 384.5

49517-68    ILT    IN-0018-TG    > 95%    25 g    24,000

49517-69    ILT    IN-0018-TG    > 95%    100 g    62,000

## Tributyltetradecylphosphonium chloride

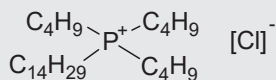


CAS RN® : 81741-28-8  
分子式 : C<sub>26</sub>H<sub>56</sub>ClP  
分子量 : 435.1

49517-78    ILT    IN-0017-TG    > 95%    25 g    14,000

49517-79    ILT    IN-0017-TG    > 95%    100 g    34,000

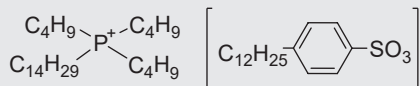
## Tributyltetradecylphosphonium chloride, 50% in water



CAS RN® : 81741-28-8  
分子式 : C<sub>26</sub>H<sub>56</sub>ClP  
分子量 : 435.2

49529-24    ILT    IN-0017-SG    > 95%    25 g    7,000

## Tributyltetradecylphosphonium dodecylbenzenesulfonate

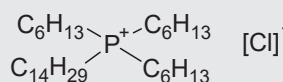


CAS RN® : 170695-05-3  
分子式 : C<sub>44</sub>H<sub>85</sub>O<sub>3</sub>PS  
分子量 : 725.2

49517-80    ILT    IN-0019-TG    > 95%    25 g    12,000

49517-81    ILT    IN-0019-TG    > 95%    100 g    31,000

## Trihexyltetradecylphosphonium chloride

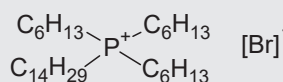


CAS RN® : 258864-54-9  
分子式 : C<sub>32</sub>H<sub>68</sub>ClP  
分子量 : 519.3

49517-86    ILT    IN-0006-TG    > 95%    25 g    9,000

49517-87    ILT    IN-0006-TG    > 95%    100 g    24,000

## Trihexyltetradecylphosphonium bromide



CAS RN® : 654057-97-3  
分子式 : C<sub>32</sub>H<sub>68</sub>BrP  
分子量 : 563.8

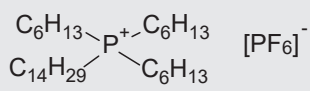
49517-84    ILT    IN-0007-TG    > 95%    25 g    12,000

49517-85    ILT    IN-0007-TG    > 95%    100 g    30,000

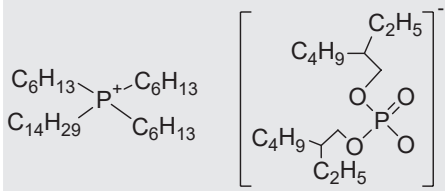


# Phosphonium based ionic liquids

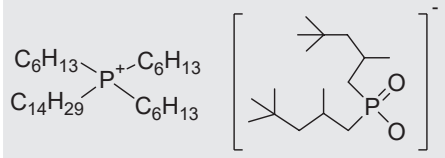
## Trihexyl(tetradecyl)phosphonium hexafluorophosphate

	CAS RN® : 374683-44-0	49517-92	ILT	IN-0012-TG	> 95%	25 g	15,000
	分子式 : C <sub>32</sub> H <sub>68</sub> F <sub>6</sub> P <sub>2</sub> 分子量 : 628.8	49517-93	ILT	IN-0012-TG	> 95%	100 g	37,000
40-45 °C	0.046 mS/cm (25 °C)						

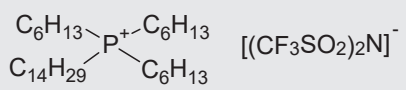
## Trihexyltetradecylphosphonium bis(2-ethylhexyl)phosphate

	CAS RN® : 1092655-30-5	49529-32	ILT	IN-0036-HP	> 98%	25 g	33,000
	分子式 : C <sub>48</sub> H <sub>102</sub> O <sub>4</sub> P <sub>2</sub> 分子量 : 805.3						

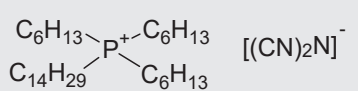
## Trihexyltetradecylphosphonium bis(2,4,4-trimethylpentyl)phosphinate

	CAS RN® : 465527-58-6	49517-82	ILT	IN-0009-TG	> 95%	25 g	36,000
	分子式 : C <sub>48</sub> H <sub>102</sub> O <sub>2</sub> P <sub>2</sub> 分子量 : 773.3	49517-83	ILT	IN-0009-TG	> 95%	100 g	79,000

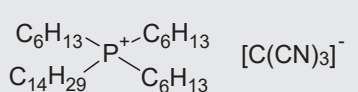
## Trihexyl(tetradecyl)phosphonium bis(trifluoromethylsulfonyl)imide

	CAS RN® : 460092-03-9	49520-24	ILT	IN-0021-HP	> 98%	25 g	13,000
	分子式 : C <sub>34</sub> H <sub>68</sub> F <sub>6</sub> NO <sub>4</sub> PS <sub>2</sub> 分子量 : 764.0	49520-25	ILT	IN-0021-HP	> 98%	100 g	33,000
-72 °C	286 cP (25 °C)    d 1.07 (25 °C)    0.14 mS/cm (30 °C)						

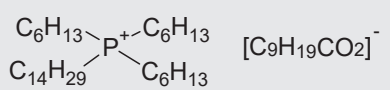
## Trihexyltetradecylphosphonium dicyanamide

	CAS RN® : 701921-71-3	49517-90	ILT	IN-0010-TG	> 95%	25 g	12,000
	分子式 : C <sub>34</sub> H <sub>68</sub> N <sub>3</sub> P 分子量 : 549.9	49517-91	ILT	IN-0010-TG	> 95%	100 g	31,000

## Trihexyltetradecylphosphonium tricyanomethanide

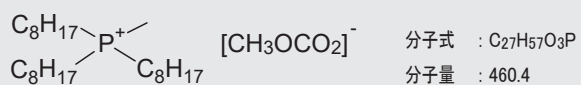
	CAS RN® : 855788-60-2	49527-55	ILT	IN-0038-HP	> 98%	25 g	34,000
	分子式 : C <sub>36</sub> H <sub>68</sub> N <sub>3</sub> P 分子量 : 573.9	49527-56	ILT	IN-0038-HP	> 98%	100 g	60,000

## Trihexyltetradecylphosphonium decanoate

	CAS RN® : 465527-65-5	49517-88	ILT	IN-0008-TG	> 95%	25 g	12,000
	分子式 : C <sub>42</sub> H <sub>87</sub> O <sub>2</sub> P 分子量 : 655.1	49517-89	ILT	IN-0008-TG	> 95%	100 g	31,000

# Phosphonium based ionic liquids

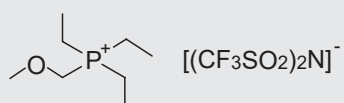
## Trioctylmethylphosphonium methylcarbonate, 50% in methanol



49529-31    ILT    IN-0031-SG    > 97%    25 g    36,000

## Phosphonium [Others]

### Triethylmethoxymethylphosphonium bis(trifluoromethanesulfonyl)imide (※当製品は在庫限りで終売となります)

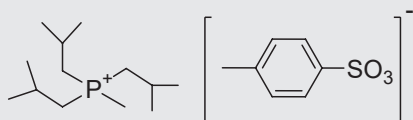


CAS RN® : 1010707-45-5

40366-35    25 mL    34,000

14 °C    35 cP (25 °C)    d 1.42    4.4 mS/cm (25 °C)

### Triisobutylmethylphosphonium tosylate



CAS RN® : 344774-05-6

49517-66    ILT    IN-0011-TG    > 95%    25 g    13,000

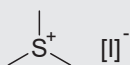
49517-67    ILT    IN-0011-TG    > 95%    100 g    33,000

45 °C    4003 cP (25 °C)    d 1.07    0.041 mS/cm (25 °C)

# Other ionic liquids

## Others

### Trimethylsulfonium iodide



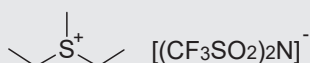
CAS RN<sup>®</sup> : 2181-42-2

分子式 : C<sub>3</sub>H<sub>9</sub>I<sub>S</sub>

分子量 : 204.1

49519-23	ILT	IL-0259-HP	> 98%	25 g	24,000
49519-24	ILT	IL-0259-HP	> 98%	100 g	59,000

### Diethylmethylsulfonium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 792188-85-3

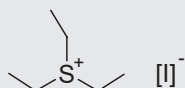
分子式 : C<sub>7</sub>H<sub>13</sub>F<sub>6</sub>NO<sub>4</sub>S<sub>3</sub>

分子量 : 385.4

39 cP (25 °C)    d 1.51 (19 °C)    5.98 mS/cm (25 °C)

49517-62	ILT	IL-0031-HP	99%	25 g	53,000
49517-63	ILT	IL-0031-HP	99%	100 g	97,000

### Triethylsulfonium iodide



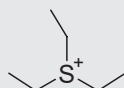
CAS RN<sup>®</sup> : 1829-92-1

分子式 : C<sub>6</sub>H<sub>15</sub>I<sub>S</sub>

分子量 : 246.2

49519-21	ILT	IL-0258-HP	> 98%	25 g	41,000
49519-22	ILT	IL-0258-HP	> 98%	100 g	101,000

### Triethylsulfonium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 321746-49-0

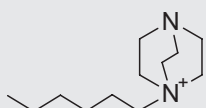
分子式 : C<sub>8</sub>H<sub>15</sub>F<sub>6</sub>NO<sub>4</sub>S<sub>3</sub>

分子量 : 399.4

32 cP (25 °C)    d 1.46 (24 °C)    5.12 mS/cm (25 °C)

49517-64	ILT	IL-0030-HP	99%	25 g	50,000
49517-65	ILT	IL-0030-HP	99%	100 g	93,000

### 1-Hexyl-1,4-diaza[2.2.2]bicyclooctanium bis(trifluoromethylsulfonyl)imide



CAS RN<sup>®</sup> : 898256-50-3

分子式 : C<sub>14</sub>H<sub>25</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>

分子量 : 477.5

49520-20	ILT	IL-0314-HP	> 99%	25 g	55,000
49520-21	ILT	IL-0314-HP	> 99%	100 g	123,000

## Related products

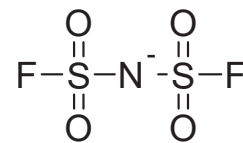
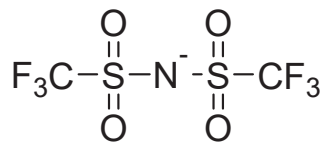
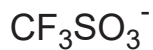
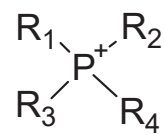
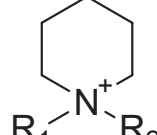
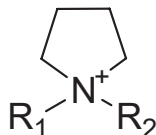
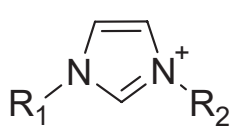
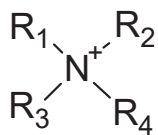
製品名	CAS RN <sup>®</sup>	分子量	製品番号	包装	価格
Lithium bis(fluorosulfonyl)imide	171611-11-3	187.1	24076-55	5 g	8,000
			24076-35	25 g	20,000
Sodium(I) bis(fluorosulfonyl)imide		203.3	49210-16	10 g	50,000
Potassium bis(fluorosulfonyl)imide	14984-76-0	219.2	33007-55	5 g	4,600
			33007-35	25 g	15,500
Lithium bis(trifluoromethanesulfonyl)imide	90076-65-6	287.1	24290-35	25 g	6,000
			24290-15	250 g	23,000
			24290-95	2 kg	☆
Sodium(I) bis(trifluoromethanesulfonyl)imide		303.1	49210-17	10 g	42,000
Potassium bis(trifluoromethanesulfonyl)imide	90076-67-8	319.2	33005-35	25 g	6,200
			33005-15	250 g	21,500
			33005-95	2 kg	☆
Magnesium(II) bis(trifluoromethanesulfonyl)imide	133395-16-1	584.6	49210-18	10 g	42,000
Zinc(II) bis(trifluoromethanesulfonyl)imide	168106-25-0	625.7	49210-21	10 g	43,000
1,1,1-Trifluoro- <i>N</i> -[(trifluoromethyl)-sulfonyl]methanesulfonamide	82113-65-3	281.2	41075-35	25 g	6,800
			41075-15	250 g	21,000
			41075-95	2 kg	☆
Lithium bis(perfluoroethylsulfonyl)imide	132843-44-8	387.1	49520-26	25 g	75,000
			49520-27	100 g	☆
Lithium bis(nonafluorobutanesulfonyl)imide	119229-99-1	587.1	24039-65	1 g	5,000
			24039-55	5 g	16,000
Potassium bis(nonafluorobutanesulfonyl)imide	129135-87-1	619.3	33008-65	1 g	5,000
			33008-55	5 g	13,500
1,1,2,2,3,3,4,4,4-Nonafluoro- <i>N</i> -[(nonafluorobutyl)sulfonyl]-1-butanesulfonamide	39847-39-7	581.2	28395-65	1 g	5,100
			28395-55	5 g	14,000
Sodium tricyanomethanide	36603-80-2	113.1	49527-57	25 g	21,000
			49527-58	100 g	57,000



## 受託合成

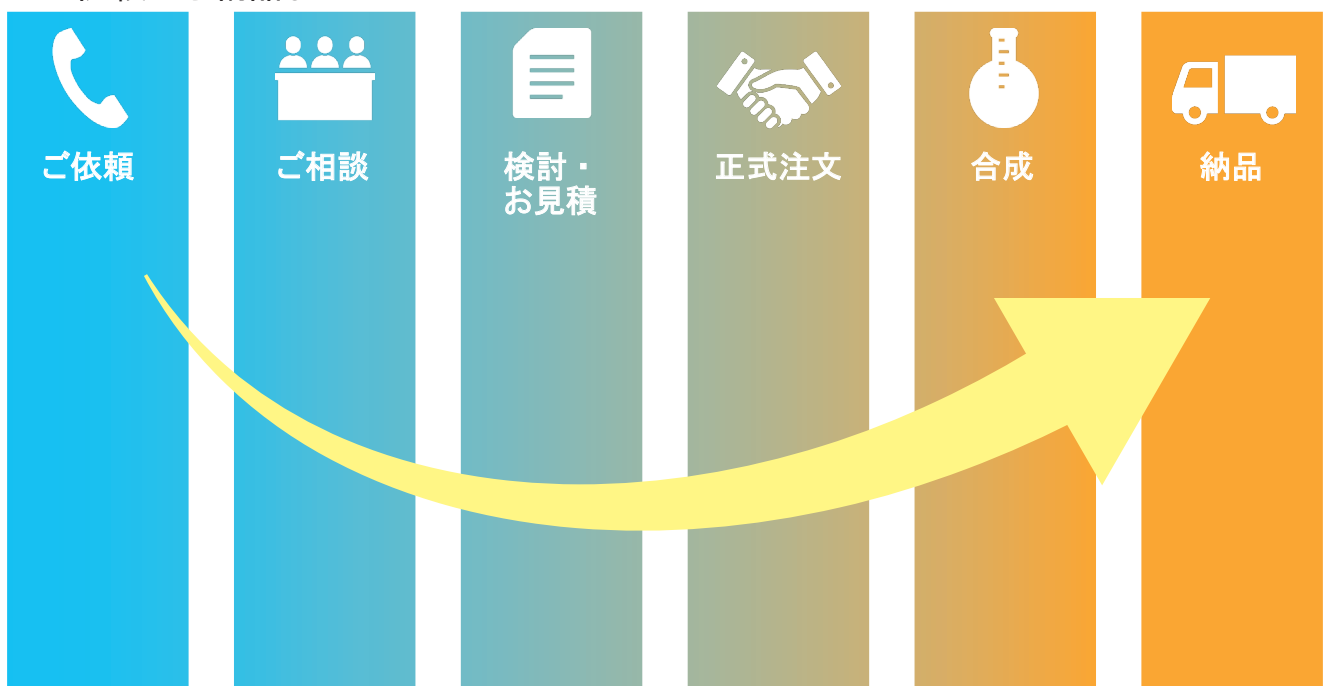
イオン液体は構成カチオンおよびアニオンの組み合わせによって、粘性や極性、親・疎水性などの物理化学的特性が変化することが知られています。そのため、イオン液体は特徴的な機能を持った液体として、例えば次世代二次電池の電解液、セルロース溶解剤、ガス吸収剤、潤滑剤などの実用化に向けた検討が行われています。

弊社のイオン液体は不純物を極力低減した高品質が特長であり、多種類のイオン液体の受託合成実績がございます。さらに、研究用途から生産用途に至るまで、様々なスケールでの供給が可能です。ご希望のイオン液体、品位、数量がございましたら、一度ご相談ください。



etc...

### ●ご依頼から納品まで



※必要に応じて秘密保持契約を締結いたします。

※合成が困難である場合や、お客様の要望を満たせないことが予測される場合は辞退させていただくことがあります。

お問い合わせおよびご質問は弊社最寄り営業所へご連絡ください。

# 化合物名 INDEX

化合物名	頁	化合物名	頁
<b>A</b>		1-Butyl-3-methylimidazolium tricyanomethanide	24
1-Allyl-3-butylimidazolium bis(trifluoromethanesulfonyl)imide	38	1-Butyl-3-methylimidazolium triflate	23
1-Allyl-3-butylimidazolium bromide	38	1-Butyl-3-methylimidazolium trifluoroacetate	24
1-Allyl-3-butylimidazolium tetrafluoroborate	38	1-Butyl-1-methylpiperidinium bis(trifluoromethylsulfonyl)imide	63
1-Allyl-3-ethylimidazolium bis(trifluoromethanesulfonyl)imide	38	1-Butyl-1-methylpiperidinium bromide	63
1-Allyl-3-ethylimidazolium bromide	37	1-Butyl-1-methylpiperidinium hexafluorophosphate	63
1-Allyl-3-ethylimidazolium iodide	38	1-Butyl-1-methylpiperidinium iodide	63
1-Allyl-3-ethylimidazolium tetrafluoroborate	38	1-Butyl-1-methylpiperidinium tetrafluoroborate	63
1-Allyl-3 <i>H</i> -imidazolium bis(trifluoromethanesulfonyl)imide	41	1-Butyl-1-methylpiperidinium triflate	63
1-Allyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide	37	1-Butyl-2-methylpyridinium bis(trifluoromethylsulfonyl)imide	59
1-Allyl-3-methylimidazolium bromide	37	1-Butyl-3-methylpyridinium bis(trifluoromethylsulfonyl)imide	59
1-Allyl-3-methylimidazolium chloride	37	1-Butyl-4-methylpyridinium bis(trifluoromethylsulfonyl)imide	60
1-Allyl-3-methylimidazolium dicyanamide	37	1-Butyl-2-methylpyridinium bromide	58
1-Allyl-3-methylimidazolium iodide	37	1-Butyl-3-methylpyridinium bromide	58
1-Allyl-3-methylimidazolium tetrafluoroborate	37	1-Butyl-4-methylpyridinium bromide	58
		1-Butyl-2-methylpyridinium chloride	58
<b>B</b>		1-Butyl-3-methylpyridinium chloride	58
<i>N</i> -Benzyl- <i>N</i> -ethyl- <i>N,N</i> -dimethylammonium bis(trifluoromethanesulfonyl)imide	67	1-Butyl-4-methylpyridinium chloride	58
1-Benzyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	42	1-Butyl-2-methylpyridinium hexafluorophosphate	59
1-Benzyl-3-methylimidazolium chloride	42	1-Butyl-3-methylpyridinium hexafluorophosphate	59
1-Benzyl-3-methylimidazolium dicyanamide	43	1-Butyl-4-methylpyridinium hexafluorophosphate	59
1-Benzyl-3-methylimidazolium hexafluorophosphate	43	1-Butyl-2-methylpyridinium iodide	58
1-Benzyl-3-methylimidazolium tetrafluoroborate	42	1-Butyl-3-methylpyridinium iodide	59
Bis(1-butyl-3-methylimidazolium) tetrathiocyanatocobaltate	23	1-Butyl-4-methylpyridinium iodide	59
Bis(1-ethyl-3-methylimidazolium) tetrathiocyanatocobaltate	20	1-Butyl-2-methylpyridinium tetrafluoroborate	60
1-Butyl-2,3-dimethylimidazolium bis(trifluoromethylsulfonyl)imide	46	1-Butyl-3-methylpyridinium tetrafluoroborate	60
1-Butyl-2,3-dimethylimidazolium bromide	45	1-Butyl-4-methylpyridinium tetrafluoroborate	60
1-Butyl-2,3-dimethylimidazolium chloride	45	1-Butyl-4-methylpyridinium tricyanomethanide	61
1-Butyl-2,3-dimethylimidazolium hexafluorophosphate	45	1-Butyl-2-methylpyridinium triflate	60
1-Butyl-2,3-dimethylimidazolium iodide	45	1-Butyl-3-methylpyridinium triflate	60
1-Butyl-2,3-dimethylimidazolium tetrafluoroborate	46	1-Butyl-4-methylpyridinium triflate	60
1-Butyl-2,3-dimethylimidazolium triflate	46	1-Butyl-1-methylpyrrolidinium bis(fluorosulfonyl)imide	49
1-Butyl-3-ethylimidazolium bis(trifluoromethylsulfonyl)imide	35	1-Butyl-1-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide	49
1-Butyl-3-ethylimidazolium bromide	35	1-Butyl-1-methylpyrrolidinium bromide	49
1-Butyl-3-ethylimidazolium hexafluorophosphate	35	1-Butyl-1-methylpyrrolidinium chloride	49
1-Butyl-3-ethylimidazolium tetrafluoroborate	35	1-Butyl-1-methylpyrrolidinium dicyanamide	50
1-Butyl-3-methylimidazolium acetate	24	1-Butyl-1-methylpyrrolidinium hexafluorophosphate	49
1-Butyl-3-methylimidazolium bis(fluorosulfonyl)imide	22	1-Butyl-1-methylpyrrolidinium iodide	49
1-Butyl-3-methylimidazolium bis(perfluoroethylsulfonyl)imide	23	1-Butyl-1-methylpyrrolidinium methylcarbonate, 50% in methanol	50
1-Butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide	22	1-Butyl-1-methylpyrrolidinium tetrafluoroborate	50
1-Butyl-3-methylimidazolium bromide	22	1-Butyl-1-methylpyrrolidinium tricyanomethanide	50
1-Butyl-3-methylimidazolium chloride	21	1-Butyl-1-methylpyrrolidinium triflate	50
1-Butyl-3-methylimidazolium chloride and Aluminum chloride (1:1.5)	21	1-Butylpyridinium bis(trifluoromethylsulfonyl)imide	54
1-Butyl-3-methylimidazolium dibutylphosphate	22	1-Butylpyridinium bromide	53
1-Butyl-3-methylimidazolium dicyanamide	24	1-Butylpyridinium chloride	53
1-Butyl-3-methylimidazolium dimethylphosphate	22	1-Butylpyridinium hexafluorophosphate	54
1-Butyl-3-methylimidazolium hexafluorophosphate	22	1-Butylpyridinium iodide	54
1-Butyl-3-methylimidazolium hydrogensulfate	23	1-Butylpyridinium tetrafluoroborate	54
1-Butyl-3-methylimidazolium iodide	22	1-Butylpyridinium triflate	54
1-Butyl-3-methylimidazolium methanesulfonate	23	<i>N</i> -Butyl- <i>N,N,N</i> -triethylammonium bis(trifluoromethylsulfonyl)imide	66
1-Butyl-3-methylimidazolium methylcarbonate, 30% in methanol	24	<i>N</i> -Butyl- <i>N,N,N</i> -trimethylammonium bis(trifluoromethylsulfonyl)imide	65
1-Butyl-3-methylimidazolium tetrachloroferrate(III)	24	<i>N</i> -Butyl- <i>N,N,N</i> -trimethylammonium bromide	65
1-Butyl-3-methylimidazolium tetrafluoroborate	23	1-Butyl-3-vinylimidazolium bis(trifluoromethylsulfonyl)imide	36
1-Butyl-3-methylimidazolium thiocyanate	23	1-Butyl-3-vinylimidazolium bromide	36

# 化合物名 INDEX

化合物名	頁	化合物名	頁
<b>C</b>		<i>N</i> -Ethyl- <i>N,N</i> -dimethyl- <i>N</i> -phenethylammonium bis(trifluoromethanesulfonyl)imide	67
Choline acetate	67	1-Ethylimidazolium bis(trifluoromethylsulfonyl)imide	41
Choline bis(trifluoromethylsulfonyl)imide	67	1-Ethylimidazolium bromide	40
Choline dihydrogenphosphate	67	1-Ethylimidazolium chloride	40
<b>D</b>		1-Ethylimidazolium nitrate	41
1-Decyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	29	1-Ethylimidazolium trifluoromethanesulfonate	41
1-Decyl-3-methylimidazolium bromide	29	1-Ethyl-3-methylimidazolium acetate	19
1-Decyl-3-methylimidazolium chloride	29	1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide	18
1-Decyl-3-methylimidazolium hexafluorophosphate	29	1-Ethyl-3-methylimidazolium bis(perfluoroethylsulfonyl)imide	18
1-Decyl-3-methylimidazolium tetrafluoroborate	29	1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	18
1-Decyl-3-methylimidazolium triflate	29	1-Ethyl-3-methylimidazolium bromide	17
1,3-Diallylimidazolium bis(trifluoromethanesulfonyl)imide	39	1-Ethyl-3-methylimidazolium chloride	16
1,3-Diallylimidazolium bromide	38	1-Ethyl-3-methylimidazolium chloride and Aluminum chloride (1:1.5)	16
1,3-Diallylimidazolium tetrafluoroborate	39	1-Ethyl-3-methylimidazolium dibutylphosphate	17
1,3-Didecyl-2-methylimidazolium chloride	46	1-Ethyl-3-methylimidazolium dicyanamide	19
1,3-Diethylimidazolium bis(trifluoromethylsulfonyl)imide	34	1-Ethyl-3-methylimidazolium diethylphosphate	17
1,3-Diethylimidazolium bromide	34	1-Ethyl-3-methylimidazolium dimethylphosphate	17
1,3-Diethylimidazolium diethylphosphate	34	1-Ethyl-3-methylimidazolium ethylsulfate	19
1,3-Diethylimidazolium ethylsulfate	34	1-Ethyl-3-methylimidazolium hexafluorophosphate	17
1,3-Diethylimidazolium hexafluorophosphate	34	1-Ethyl-3-methylimidazolium hydrogensulfate	18
1,3-Diethylimidazolium tetrafluoroborate	34	1-Ethyl-3-methylimidazolium iodide	17
Diethylmethylammonium methanesulfonate	64	1-Ethyl-3-methylimidazolium methanesulfonate	18
Diethylmethylammonium trifluoromethanesulfonate	64	1-Ethyl-3-methylimidazolium methylcarbonate, 30% in methanol	20
<i>N,N</i> -Diethyl- <i>N</i> -methyl- <i>N</i> -(2-methoxyethyl)- ammonium bis(trifluoromethanesulfonyl)imide	67	1-Ethyl-3-methylimidazolium methylphosphonate	17
<i>N,N</i> -Diethyl- <i>N</i> -methyl- <i>N</i> -(2-methoxyethyl)ammonium tetrafluoroborate	68	1-Ethyl-3-methylimidazolium methylsulfate	19
<i>N,N</i> -Diethyl- <i>N</i> -methyl- <i>N</i> -propylammonium bis(fluorosulfonyl)imide	65	1-Ethyl-3-methylimidazolium nitrate	20
Diethylmethylsulfonium bis(trifluoromethylsulfonyl)imide	73	1-Ethyl-3-methylimidazolium octylsulfate	19
Dimethylammonium nitrate	64	1-Ethyl-3-methylimidazolium tetrafluoroborate	18
1,2-Dimethylimidazolium bis(trifluoromethylsulfonyl)imide	44	1-Ethyl-3-methylimidazolium thiocyanate	19
1,3-Dimethylimidazolium bis(trifluoromethylsulfonyl)imide	16	1-Ethyl-3-methylimidazolium tosylate	20
1,2-Dimethylimidazolium chloride	44	1-Ethyl-3-methylimidazolium tricyanomethanide	19
1,3-Dimethylimidazolium dimethylphosphate	16	1-Ethyl-3-methylimidazolium triflate	18
1,3-Dimethylimidazolium iodide	16	1-Ethyl-3-methylimidazolium trifluoroacetate	20
1,3-Dimethylimidazolium methylphosphonate	16	<i>N</i> -Ethyl- <i>N</i> -methyl- <i>N</i> -propylammonium perfluorobutanesulfonate	64
1,3-Dimethylimidazolium methylsulfate	16	1-Ethyl-3-methylpyridinium bis(nonafluorobutanesulfonyl)imide	56
1,2-Dimethyl-3-propylimidazolium bis(trifluoromethylsulfonyl)imide	45	1-Ethyl-2-methylpyridinium bis(trifluoromethylsulfonyl)imide	56
1,2-Dimethyl-3-propylimidazolium bromide	45	1-Ethyl-3-methylpyridinium bis(trifluoromethylsulfonyl)imide	56
1,2-Dimethyl-3-propylimidazolium iodide	45	1-Ethyl-4-methylpyridinium bis(trifluoromethylsulfonyl)imide	56
1-Dodecyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	30	1-Ethyl-2-methylpyridinium bromide	56
1-Dodecyl-3-methylimidazolium bis(2,4,4-trimethylpentyl)phosphinate	30	1-Ethyl-3-methylpyridinium bromide	56
1-Dodecyl-3-methylimidazolium bromide	30	1-Ethyl-4-methylpyridinium bromide	56
1-Dodecyl-3-methylimidazolium chloride	30	1-Ethyl-3-methylpyridinium perfluorobutanesulfonate	57
1-Dodecyl-3-methylimidazolium hexafluorophosphate	30	1-Ethyl-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide	47
1-Dodecyl-3-methylimidazolium iodide	30	1-Ethyl-1-methylpyrrolidinium bromide	47
1-Dodecyl-3-methylimidazolium tetrafluoroborate	30	1-Ethyl-1-methylpyrrolidinium hexafluorophosphate	47
1-Dodecyl-3-methylimidazolium triflate	31	1-Ethyl-1-methylpyrrolidinium iodide	47
<b>E</b>		1-Ethyl-1-methylpyrrolidinium tetrafluoroborate	47
Ethylammonium nitrate	64	1-Ethyl-1-methylpyrrolidinium triflate	47
1-Ethyl-2,3-dimethylimidazolium bis(trifluoromethylsulfonyl)imide	44	1-Ethyl-3-propylimidazolium bis(trifluoromethylsulfonyl)imide	35
1-Ethyl-2,3-dimethylimidazolium bromide	44	1-Ethyl-3-propylimidazolium bromide	34
1-Ethyl-2,3-dimethylimidazolium hexafluorophosphate	44	1-Ethyl-3-propylimidazolium hexafluorophosphate	35
1-Ethyl-2,3-dimethylimidazolium tetrafluoroborate	44	1-Ethyl-3-propylimidazolium tetrafluoroborate	35
1-Ethyl-2,3-dimethylimidazolium triflate	44	1-Ethylpyridinium bis(trifluoromethylsulfonyl)imide	52
		1-Ethylpyridinium bromide	52
		1-Ethylpyridinium hexafluorophosphate	52

# 化合物名 INDEX

化合物名	頁	化合物名	頁
1-Ethylpyridinium iodide	52	1-(2-Methoxyethyl)-1-methyl-pyrrolidinium tetrafluoroborate	51
1-Ethylpyridinium tetrafluoroborate	52	Methylammonium nitrate	64
1-Ethylpyridinium triflate	52	1-Methylimidazolium bis(trifluoromethylsulfonyl)imide	40
1-Ethyl-3-vinylimidazolium bis(trifluoromethylsulfonyl)imide	36	1-Methylimidazolium bromide	40
1-Ethyl-3-vinylimidazolium bromide	36	1-Methylimidazolium chloride	40
		1-Methylimidazolium nitrate	40
<b>H</b>		1-Methylimidazolium trifluoromethanesulfonate	40
1-Heptyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	27	1-Methyl-3-nonylimidazolium bis(trifluoromethylsulfonyl)imide	28
1-Heptyl-3-methylimidazolium bromide	26	1-Methyl-3-nonylimidazolium bromide	28
1-Heptyl-3-methylimidazolium hexafluorophosphate	27	1-Methyl-3-nonylimidazolium hexafluorophosphate	28
1-Heptyl-3-methylimidazolium tetrafluoroborate	27	1-Methyl-3-nonylimidazolium tetrafluoroborate	29
1-Hexadecyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	32	1-Methyl-3-octadecylimidazolium bis(trifluoromethylsulfonyl)imide	32
1-Hexadecyl-3-methylimidazolium chloride	31	1-Methyl-3-octadecylimidazolium chloride	32
1-Hexadecyl-3-methylimidazolium dicyanamide	32	1-Methyl-3-octadecylimidazolium hexafluorophosphate	32
1-Hexadecyl-3-methylimidazolium hexafluorophosphate	31	1-Methyl-3-octadecylimidazolium tetrafluoroborate	33
1-Hexadecyl-3-methylimidazolium tetrafluoroborate	32	1-Methyl-3-octylimidazolium bis(trifluoromethylsulfonyl)imide	27
1-Hexadecyl-3-methylimidazolium tricyanomethanide	32	1-Methyl-3-octylimidazolium bromide	27
<i>N</i> -Hexadecyl- <i>N,N,N</i> -trimethylammonium bis(trifluoromethylsulfonyl)imide	65	1-Methyl-3-octylimidazolium chloride	27
1-Hexyl-1,4-diaza[2.2.2]bicyclooctanium bis(trifluoromethylsulfonyl)imide	73	1-Methyl-3-octylimidazolium hexafluorophosphate	27
1-Hexyl-2,3-dimethylimidazolium iodide	46	1-Methyl-3-octylimidazolium perfluorobutanesulfonate	28
1-Hexyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	26	1-Methyl-3-octylimidazolium tetrafluoroborate	28
1-Hexyl-3-methylimidazolium bromide	25	1-Methyl-3-octylimidazolium tricyanomethanide	28
1-Hexyl-3-methylimidazolium chloride	25	1-Methyl-3-octylimidazolium triflate	28
1-Hexyl-3-methylimidazolium hexafluorophosphate	25	1-Methyl-1-octylpyrrolidinium bis(trifluoromethylsulfonyl)imide	50
1-Hexyl-3-methylimidazolium iodide	25	1-Methyl-3-pentylimidazolium bis(trifluoromethylsulfonyl)imide	25
1-Hexyl-3-methylimidazolium perfluorobutanesulfonate	26	1-Methyl-3-pentylimidazolium bromide	24
1-Hexyl-3-methylimidazolium tetrafluoroborate	26	1-Methyl-3-pentylimidazolium hexafluorophosphate	25
1-Hexyl-3-methylimidazolium tricyanomethanide	26	1-Methyl-3-pentylimidazolium tetrafluoroborate	25
1-Hexyl-3-methylimidazolium triflate	26	1-Methyl-3-propylimidazolium bis(trifluoromethylsulfonyl)imide	21
1-Hexyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate	26	1-Methyl-3-propylimidazolium bromide	20
1-Hexyl-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide	50	1-Methyl-3-propylimidazolium chloride	20
1-Hexylpyridinium bis(trifluoromethylsulfonyl)imide	55	1-Methyl-3-propylimidazolium hexafluorophosphate	21
1-Hexylpyridinium bromide	54	1-Methyl-3-propylimidazolium iodide	21
1-Hexylpyridinium chloride	54	1-Methyl-3-propylimidazolium tetrafluoroborate	21
1-Hexylpyridinium hexafluorophosphate	55	1-Methyl-3-propylimidazolium trifluoromethanesulfonate	21
1-Hexylpyridinium iodide	55	1-Methyl-1-propylpiperidinium bis(fluorosulfonyl)imide	62
1-Hexylpyridinium tetrafluoroborate	55	1-Methyl-1-propylpiperidinium bis(trifluoromethanesulfonyl)imide	62
1-Hexylpyridinium triflate	55	1-Methyl-1-propylpiperidinium bromide	62
<i>N</i> -Hexyl- <i>N,N,N</i> -trimethylammonium bis(trifluoromethanesulfonyl)imide	65	1-Methyl-1-propylpiperidinium hexafluorophosphate	62
<i>N</i> -Hexyl- <i>N,N,N</i> -trimethylammonium bromide	65	1-Methyl-1-propylpiperidinium iodide	62
2-Hydroxyethylammonium formate	67	1-Methyl-1-propylpiperidinium tetrafluoroborate	62
1-(2-Hydroxyethyl)-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	41	1-Methyl-1-propylpiperidinium triflate	62
1-(2-Hydroxyethyl)-3-methylimidazolium chloride	41	2-Methyl-1-propylpyridinium bis(trifluoromethylsulfonyl)imide	57
1-(2-Hydroxyethyl)-3-methylimidazolium tetrafluoroborate	41	3-Methyl-1-propylpyridinium bis(trifluoromethylsulfonyl)imide	57
1-(3-Hydroxypropyl)-3-methylimidazolium bis(trifluoromethanesulfonyl)imide	42	4-Methyl-1-propylpyridinium bis(trifluoromethylsulfonyl)imide	57
		2-Methyl-1-propylpyridinium bromide	57
<b>L</b>		3-Methyl-1-propylpyridinium bromide	57
Lithium bis(fluorosulfonyl)imide	74	4-Methyl-1-propylpyridinium bromide	57
Lithium bis(nonafluorobutanesulfonyl)imide	74	1-Methyl-1-propylpyrrolidinium bis(fluorosulfonyl)imide	48
Lithium bis(perfluoroethylsulfonyl)imide	74	1-Methyl-1-propylpyrrolidinium bis(trifluoromethanesulfonyl)imide	48
Lithium bis(trifluoromethanesulfonyl)imide	74	1-Methyl-1-propylpyrrolidinium bromide	48
		1-Methyl-1-propylpyrrolidinium chloride	47
<b>M</b>		1-Methyl-1-propylpyrrolidinium dicyanamide	49
Magnesium(II) bis(trifluoromethanesulfonyl)imide	74	1-Methyl-1-propylpyrrolidinium hexafluorophosphate	48
1-(2-Methoxyethyl)-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	42	1-Methyl-1-propylpyrrolidinium iodide	48
1-(2-Methoxyethyl)-1-methyl-pyrrolidinium bis(trifluoromethanesulfonyl)imide	51	1-Methyl-1-propylpyrrolidinium tetrafluoroborate	48



# 化合物名 INDEX

化合物名	頁	化合物名	頁
1-Methyl-1-propylpyrrolidinium triflate	48	Tetraoctylphosphonium bromide	69
1-Methyl-3-tetradecylimidazolium bis(trifluoromethylsulfonyl)imide	31	Tributylethylphosphonium diethylphosphate	70
1-Methyl-3-tetradecylimidazolium chloride	31	<i>N,N,N</i> -Tributyl- <i>N</i> -methylammonium bis(trifluoromethylsulfonyl)imide	66
1-Methyl-3-tetradecylimidazolium hexafluorophosphate	31	<i>N,N,N</i> -Tributyl- <i>N</i> -methylammonium iodide	66
1-Methyl-3-tetradecylimidazolium tetrafluoroborate	31	Tributylmethylphosphonium bis(trifluoromethanesulfonyl)imide	69
<i>N</i> -Methyl- <i>N,N,N</i> -trioctylammonium bis(trifluoromethylsulfonyl)imide	66	Tributylmethylphosphonium methylcarbonate	70
<i>N</i> -Methyl- <i>N,N,N</i> -trioctylammonium triflate	66	Tributylmethylphosphonium methylsulfate	69
		Tributyltetradecylphosphonium chloride	70
<b>N</b>		Tributyltetradecylphosphonium chloride, 50% in water	70
1,1,2,2,3,3,4,4,4-Nonafluoro- <i>N</i> -[(nonafluorobutyl)sulfonyl]-1-butanefulfonamide	74	Tributyltetradecylphosphonium dodecylbenzenesulfonate	70
		Triethylmethoxymethylphosphonium bis(trifluoromethanesulfonyl)imide	72
<b>P</b>		<i>N,N,N</i> -Triethyl- <i>N</i> -octylammonium bis(trifluoromethylsulfonyl)imide	66
Potassium bis(fluorosulfonyl)imide	74	Triethyloctylphosphonium bis(trifluoromethanesulfonyl)imide	69
Potassium bis(nonafluorobutanefulfonate)sulfonate	74	Triethylpentylphosphonium bis(trifluoromethanesulfonyl)imide	69
Potassium bis(trifluoromethanesulfonyl)imide	74	Triethylsulfonium bis(trifluoromethylsulfonyl)imide	73
Propylammonium nitrate	64	Triethylsulfonium iodide	73
1-Propylpyridinium bis(trifluoromethylsulfonyl)imide	53	1,1,1-Trifluoro- <i>N</i> -[(trifluoromethyl)sulfonyl]methanesulfonamide	74
1-Propylpyridinium bromide	52	Trihexyltetradecylphosphonium bis(2-ethylhexyl)phosphate	71
1-Propylpyridinium hexafluorophosphate	53	Trihexyl(tetradecyl)phosphonium bis(trifluoromethylsulfonyl)imide	71
1-Propylpyridinium iodide	53	Trihexyltetradecylphosphonium bis(2,4,4-trimethylpentyl)phosphinate	71
1-Propylpyridinium tetrafluoroborate	53	Trihexyltetradecylphosphonium bromide	70
1-Propylpyridinium triflate	53	Trihexyltetradecylphosphonium chloride	70
		Trihexyltetradecylphosphonium decanoate	71
<b>S</b>		Trihexyltetradecylphosphonium dicyanamide	71
Sodium(I) bis(fluorosulfonyl)imide	74	Trihexyl(tetradecyl)phosphonium hexafluorophosphate	71
Sodium(I) bis(trifluoromethanesulfonyl)imide	74	Trihexyltetradecylphosphonium tricyanomethanide	71
Sodium tricyanomethanide	74	Triisobutylmethylphosphonium tosylate	72
1-(4-Sulfobutyl)-3-methylimidazolium bis(trifluoromethanesulfonyl)imide	42	<i>N,N,N</i> -Trimethyl- <i>N</i> -propylammonium bis(trifluoromethanesulfonyl)imide	65
1-(4-Sulfobutyl)-3-methylimidazolium trifluoromethanesulfonate	42	Trimethylsulfonium iodide	73
		Trioctylmethylphosphonium methylcarbonate, 50% in methanol	72
<b>T</b>			
Tetrabutylphosphonium bromide	69	<b>Z</b>	
Tetrabutylphosphonium chloride	69	Zinc(II) bis(trifluoromethanesulfonyl)imide	74
Tetraethylammonium bis(trifluoromethylsulfonyl)imide	66		

# CAS RN<sup>®</sup> INDEX

CAS RN <sup>®</sup>	頁	CAS RN <sup>®</sup>	頁	CAS RN <sup>®</sup>	頁	CAS RN <sup>®</sup>	頁
350-48-1	52	56511-19-4	48	133395-16-1	74	227617-70-1	45
872-90-2	52	61545-99-1	27	143314-14-1	20	235789-75-0	18
873-71-2	52	61546-00-7	30	143314-16-3	18	239084-00-5	53
874-80-6	53	61755-34-8	41	143314-17-4	19	244193-48-4	21
874-81-7	54	64697-40-1	27	145022-44-2	18	244193-49-5	25
1124-64-7	53	65039-05-6	22	145022-45-3	18	244193-50-8	26
1829-92-1	73	65039-07-8	37	155371-19-0	17	244193-51-9	27
1906-79-2	52	65039-08-9	17	156204-43-2	40	244193-52-0	28
2181-42-2	73	65039-09-0	16	161401-26-9	66	244193-55-3	29
2304-30-5	69	65039-10-3	37	168106-25-0	74	244193-56-4	29
2650-51-3	65	65350-59-6	58	169051-76-7	45	244193-59-7	30
2650-53-5	65	67021-55-0	57	170695-05-3	70	244193-61-1	31
3085-79-8	66	69056-62-8	69	171058-17-6	25	244193-64-4	32
3115-68-2	69	69227-51-6	47	171058-18-7	29	244193-65-5	33
3878-80-6	52	70850-58-7	57	171058-19-8	32	251102-26-7	20
4186-68-9	47	70862-65-6	46	171058-21-2	31	254731-29-8	23
4333-62-4	16	74440-81-6	54	171611-11-3	74	256647-89-9	35
5411-09-6	57	79917-89-8	20	174501-64-5	22	258273-67-5	59
6220-15-1	54	79917-90-1	21	174501-65-6	23	258273-75-5	65
7324-00-7	55	81505-35-3	40	174899-64-0	35	258864-54-9	70
13311-31-4	58	81741-28-8	70	174899-65-1	20	262297-13-2	23
14586-35-7	67	81995-09-7	30	174899-66-2	23	268536-05-6	65
14984-76-0	74	82113-65-3	74	174899-72-0	44	280779-52-4	25
17874-63-4	62	83846-92-8	67	174899-82-2	18	280779-53-5	25
17899-81-1	16	85100-76-1	20	174899-83-3	22	284049-75-8	24
20445-94-7	70	85100-77-2	22	174899-86-6	41	286453-46-1	60
22113-86-6	64	85100-78-3	25	174899-88-8	34	288627-94-1	46
22113-87-7	64	88840-42-0	62	174899-89-9	35	292140-86-4	44
22113-88-8	64	90076-65-6	74	174899-90-2	44	304680-35-1	25
23906-97-0	69	90076-67-8	74	174899-94-6	24	304680-36-2	27
26576-84-1	58	93457-69-3	49	178631-01-1	42	307492-75-7	44
26576-85-2	58	94280-72-5	63	178631-03-3	28	321746-49-0	73
30781-73-8	64	97345-90-9	16	178631-04-4	27	324574-91-6	66
31410-07-8	37	98892-75-2	45	178631-05-5	25	324575-10-2	69
31483-71-3	38	98892-76-3	44	186088-50-6	54	327022-58-2	48
32353-49-4	56	99257-94-0	40	187863-42-9	54	327022-59-3	48
32353-64-3	59	101023-58-9	40	188589-32-4	29	327022-60-6	49
32354-50-7	56	103173-73-5	52	203389-28-0	54	328090-25-1	20
34311-88-1	36	107937-17-7	45	204854-22-8	36	330671-29-9	49
34311-90-5	36	108203-70-9	45	210230-43-6	65	331717-63-6	19
34531-53-8	44	112400-85-8	58	210230-48-1	66	342573-75-5	19
35487-17-3	40	112400-86-9	58	216299-72-8	21	342789-81-5	23
35935-34-3	17	114569-84-5	30	216299-76-2	18	343851-31-0	24
36443-80-8	42	117947-85-0	47	216300-12-8	21	343851-32-1	26
36603-80-2	74	119171-18-5	21	218151-78-1	45	343851-34-3	28
37971-78-1	63	119229-99-1	74	219947-93-0	30	343952-29-4	28
39847-39-7	74	120256-45-3	70	219947-94-1	31	343952-33-0	60
39868-02-5	53	121057-90-7	47	219947-95-2	31	344774-05-6	72
53226-35-0	67	121107-18-4	66	219947-96-3	32	344790-86-9	59
54304-66-4	34	125652-55-3	58	223436-99-5	47	344790-87-0	23
54778-76-6	56	129135-87-1	74	223437-05-6	48	345984-11-4	50
56511-17-2	49	132843-44-8	74	223437-11-4	49	347882-21-7	35

# CAS RN<sup>®</sup> INDEX

CAS RN <sup>®</sup>	頁	CAS RN <sup>®</sup>	頁	CAS RN <sup>®</sup>	頁	CAS RN <sup>®</sup>	頁
350493-08-2	46	460983-97-5	55	758716-72-2	36	927021-43-0	50
353239-08-4	40	464927-72-8	68	765910-73-4	46	945406-32-6	34
353239-10-8	41	464927-76-2	51	790663-79-5	19	945611-27-8	17
353239-12-0	44	464927-84-2	67	792188-85-3	73	945715-39-9	64
357915-04-9	27	465527-58-6	71	797789-00-5	55	945715-44-6	64
359845-21-9	24	465527-65-5	71	803732-17-4	39	945732-42-3	38
362043-46-7	29	474368-70-2	55	817575-06-7	57	958445-60-8	43
367522-96-1	50	475575-45-2	45	827027-25-8	67	1001557-05-6	26
370085-15-7	34	475681-62-0	60	827027-30-5	42	1002754-38-2	69
370865-80-8	50	479500-35-1	49	841251-37-4	56	1010707-45-5	72
370865-89-7	19	500996-04-3	42	845835-03-2	59	1010707-47-7	69
374564-83-7	41	501693-36-3	40	847335-65-3	34	1015420-87-7	57
374683-44-0	71	501693-38-5	41	848641-69-0	17	1031250-01-7	65
375395-33-8	66	501693-46-5	41	851606-63-8	37	1048377-03-2	16
380497-19-8	50	516474-01-4	19	852620-97-4	48	1092655-30-5	71
382150-50-7	26	516474-04-7	34	852699-06-0	39	1104525-90-7	53
384347-09-5	59	528818-82-8	47	855788-60-2	71	1137959-66-0	17
390423-43-5	54	581101-91-9	35	857841-32-8	60	1186103-43-4	67
401788-99-6	59	597581-48-1	60	863498-30-0	38	1186599-90-5	64
402846-78-0	46	608140-09-6	48	863498-32-2	38	1221445-34-6	62
403842-84-2	28	608140-12-1	62	863498-34-4	38	1223496-96-5	50
404001-48-5	30	623167-81-7	55	869858-84-4	17	1224852-54-3	48
404001-49-6	31	623580-02-9	63	878027-72-6	50	1235234-32-8	65
404001-50-9	32	637348-59-5	34	878027-73-7	24	1235234-58-8	22
404001-51-0	32	652134-09-3	37	878550-45-9	21	1242154-93-3	53
404001-52-1	31	652134-11-7	38	879866-95-2	62	1242154-97-7	53
404001-62-3	31	654057-97-3	70	882172-79-4	60	1245942-47-5	23
405514-94-5	66	654058-04-5	16	886439-34-5	63	1255925-80-4	20
412009-61-1	18	655249-87-9	37	891772-94-4	22	1257647-66-7	63
412009-62-2	29	657414-80-7	42	893443-18-0	47	1268986-44-2	59
425382-14-5	27	663199-28-8	22	898256-50-3	73	1312925-66-8	61
433337-11-2	43	666823-18-3	19	905972-83-0	28	1357500-93-6	63
433337-21-4	28	701921-71-3	71	909390-59-6	42	1365535-17-6	26
433337-23-6	29	712354-97-7	52	911303-46-3	62	1426821-81-9	62
433337-24-7	42	712354-99-9	56	916850-37-8	24	1456878-01-5	57
448245-52-1	24	712355-03-8	56	917956-73-1	37	1770850-03-7	35
460092-03-9	71	713512-19-7	26	920981-07-3	38	1770850-20-8	60
460345-16-8	26	757240-24-7	51				

# 製品番号 INDEX

製品番号	頁	製品番号	頁	製品番号	頁	製品番号	頁
01119-25	38	11475-55	38	33008-55	74	49503-30	23
01119-35	38	11476-15	39	33008-65	74	49503-31	23
01120-25	37	11476-35	39	35408-1A	16	49503-32	23
01120-35	37	11476-55	39	35408-2A	16	49503-33	23
01930-15	37	11477-15	39	35409-1A	21	49503-38	49
01930-35	37	11477-35	39	35409-2A	21	49503-39	49
01930-55	37	11477-55	39	35416-1A	54	49503-40	50
01931-15	38	11507-25	45	35418-1A	25	49503-41	50
01931-35	38	11507-35	45	35419-1A	54	49503-48	50
01931-55	38	14545-45	56	35420-1A	55	49503-49	50
01932-15	38	14609-33	17	35421-1A	23	49503-56	53
01932-35	38	14609-53	17	35423-1A	54	49503-57	53
01932-55	38	14643-33	17	35665-1A	31	49503-84	26
01933-15	38	14643-53	17	35667-1A	17	49503-89	19
01933-35	38	14644-33	18	35667-2A	17	49503-90	19
01933-55	38	14644-53	18	35676-1A	27	49504-01	18
01934-15	38	14669-25	17	35676-2A	27	49504-02	18
01934-35	38	14669-35	17	35683-1A	46	49504-25	26
01934-55	38	14670-25	17	40334-35	69	49504-35	26
01935-15	38	14670-35	17	40335-35	69	49504-36	26
01935-35	38	14697-35	18	40336-35	69	49505-92	46
01935-55	38	18010-25	25	40366-35	72	49506-50	19
01986-15	37	18010-35	25	41075-15	74	49506-51	19
01986-35	37	24039-55	74	41075-35	74	49506-78	46
01986-55	37	24039-65	74	41075-95	74	49506-90	19
01987-15	37	24076-35	74	41110-33	65	49506-91	19
01987-35	37	24076-55	74	41110-53	65	49507-20	18
01987-55	37	24290-15	74	49210-00	41	49507-21	18
01988-15	37	24290-35	74	49210-01	41	49507-62	67
01988-35	37	24290-95	74	49210-02	40	49507-63	67
01988-55	37	25966-05	51	49210-03	42	49507-70	16
04235-25	22	25966-35	51	49210-04	42	49507-71	16
04235-35	22	25966-55	51	49210-05	67	49507-73	17
05063-33	22	25967-05	51	49210-06	67	49507-74	57
05063-53	22	25967-25	51	49210-07	65	49507-75	57
05064-33	22	25967-45	51	49210-08	65	49514-00	16
05064-53	22	25978-35	48	49210-09	62	49514-01	16
05065-33	23	26039-33	62	49210-10	42	49514-02	19
05065-53	23	26039-53	62	49210-11	47	49514-03	19
05068-33	21	26050-35	48	49210-12	16	49514-04	18
05068-53	21	26050-55	48	49210-13	65	49514-05	18
05816-35	22	26125-33	49	49210-14	65	49514-06	17
10506-25	16	26125-53	49	49210-15	66	49514-07	17
10506-35	16	28395-55	74	49210-16	74	49514-08	16
11468-05	67	28395-65	74	49210-17	74	49514-09	16
11468-35	67	32520-25	21	49210-18	74	49514-10	19
11468-55	67	32520-35	21	49210-19	49	49514-11	19
11469-05	68	33005-15	74	49210-20	49	49514-12	17
11469-25	68	33005-35	74	49210-21	74	49514-13	17
11469-45	68	33005-95	74	49503-09	22	49514-14	19
11475-15	38	33007-35	74	49503-10	22	49514-15	19
11475-35	38	33007-55	74	49503-13	24	49514-16	17

# 製品番号 INDEX

製品番号	頁	製品番号	頁	製品番号	頁	製品番号	頁
49514-17	17	49514-72	26	49515-26	31	49515-79	46
49514-18	18	49514-73	25	49515-27	31	49515-80	46
49514-19	18	49514-74	25	49515-28	31	49515-81	46
49514-20	17	49514-75	25	49515-30	31	49515-82	52
49514-21	17	49514-76	25	49515-31	31	49515-83	52
49514-22	18	49514-77	25	49515-32	32	49515-84	52
49514-23	18	49514-78	25	49515-33	32	49515-85	52
49514-24	19	49514-79	25	49515-34	31	49515-86	52
49514-25	19	49514-80	25	49515-35	31	49515-87	52
49514-28	18	49514-81	26	49515-36	31	49515-88	52
49514-30	18	49514-82	26	49515-37	31	49515-89	52
49514-31	19	49514-83	26	49515-38	32	49515-90	52
49514-32	19	49514-84	26	49515-39	32	49515-91	52
49514-33	20	49514-85	27	49515-40	32	49515-92	52
49514-34	20	49514-86	27	49515-41	32	49515-93	52
49514-35	18	49514-87	27	49515-42	32	49515-94	53
49514-36	18	49514-88	27	49515-43	32	49515-95	53
49514-37	21	49514-89	27	49515-44	37	49515-96	54
49514-38	21	49514-90	27	49515-45	37	49515-97	54
49514-39	20	49514-91	27	49515-46	42	49516-00	53
49514-40	20	49514-92	27	49515-47	42	49516-01	53
49514-41	20	49514-93	28	49515-48	41	49516-02	53
49514-42	20	49514-94	28	49515-49	41	49516-03	53
49514-43	21	49514-95	28	49515-50	41	49516-04	54
49514-44	21	49514-96	28	49515-51	41	49516-05	54
49514-45	21	49514-97	29	49515-52	44	49516-06	54
49514-46	21	49515-00	29	49515-53	44	49516-07	54
49514-47	21	49515-01	29	49515-54	44	49516-08	54
49514-48	21	49515-02	29	49515-55	44	49516-09	54
49514-49	22	49515-03	29	49515-56	44	49516-10	54
49514-50	22	49515-04	29	49515-57	44	49516-11	54
49514-51	22	49515-05	29	49515-58	44	49516-12	54
49514-52	22	49515-06	29	49515-59	44	49516-13	54
49514-53	21	49515-07	29	49515-60	44	49516-14	54
49514-54	21	49515-08	29	49515-61	44	49516-15	54
49514-55	24	49515-09	29	49515-62	45	49516-16	55
49514-56	24	49515-10	29	49515-63	45	49516-17	55
49514-57	22	49515-11	30	49515-64	45	49516-18	55
49514-58	22	49515-12	30	49515-65	45	49516-19	55
49514-59	23	49515-13	30	49515-66	46	49516-20	55
49514-60	23	49515-14	30	49515-67	46	49516-21	55
49514-61	22	49515-15	30	49515-68	45	49516-22	55
49514-62	22	49515-16	30	49515-69	45	49516-23	55
49514-63	23	49515-17	30	49515-70	45	49516-24	56
49514-64	23	49515-18	30	49515-71	45	49516-25	56
49514-65	23	49515-19	30	49515-72	45	49516-26	56
49514-66	23	49515-20	30	49515-73	45	49516-27	56
49514-67	23	49515-21	30	49515-74	45	49516-28	57
49514-68	23	49515-22	30	49515-75	45	49516-30	57
49514-69	23	49515-23	31	49515-76	46	49516-31	57
49514-70	23	49515-24	31	49515-77	46	49516-32	57
49514-71	26	49515-25	31	49515-78	46	49516-33	58

# 製品番号 INDEX

製品番号	頁	製品番号	頁	製品番号	頁	製品番号	頁
49516-34	58	49516-94	67	49517-51	49	49518-07	64
49516-35	58	49516-95	62	49517-52	50	49518-08	48
49516-36	58	49516-96	62	49517-53	50	49518-09	48
49516-37	59	49516-97	62	49517-54	49	49518-10	24
49516-38	59	49517-00	62	49517-55	49	49518-11	24
49516-39	58	49517-01	62	49517-56	49	49518-15	40
49516-40	58	49517-02	62	49517-57	49	49518-16	40
49516-41	60	49517-03	62	49517-58	50	49518-19	64
49516-42	60	49517-04	62	49517-59	50	49518-20	64
49516-43	60	49517-05	62	49517-60	50	49518-21	64
49516-44	60	49517-06	62	49517-61	50	49518-22	64
49516-45	59	49517-07	62	49517-62	73	49518-23	64
49516-46	59	49517-08	62	49517-63	73	49518-24	64
49516-47	58	49517-09	63	49517-64	73	49518-25	46
49516-48	58	49517-10	63	49517-65	73	49518-26	46
49516-49	58	49517-11	63	49517-66	72	49518-31	34
49516-50	58	49517-12	63	49517-67	72	49518-32	34
49516-51	59	49517-13	63	49517-68	70	49518-33	16
49516-52	59	49517-14	63	49517-69	70	49518-34	16
49516-53	59	49517-15	63	49517-70	69	49518-35	32
49516-54	59	49517-16	63	49517-71	69	49518-36	32
49516-55	60	49517-17	63	49517-72	69	49518-37	17
49516-56	60	49517-18	63	49517-73	69	49518-38	17
49516-57	60	49517-19	63	49517-74	69	49518-39	57
49516-58	60	49517-20	63	49517-75	69	49518-40	57
49516-59	60	49517-21	47	49517-76	69	49518-41	57
49516-60	60	49517-22	47	49517-77	69	49518-42	57
49516-61	58	49517-23	47	49517-78	70	49518-43	57
49516-62	58	49517-24	47	49517-79	70	49518-44	57
49516-63	58	49517-25	47	49517-80	70	49518-45	52
49516-64	58	49517-26	47	49517-81	70	49518-46	52
49516-65	59	49517-27	47	49517-82	71	49518-47	56
49516-66	59	49517-28	47	49517-83	71	49518-48	56
49516-67	59	49517-30	47	49517-84	70	49518-49	56
49516-68	59	49517-31	47	49517-85	70	49518-50	56
49516-69	60	49517-32	47	49517-86	70	49518-51	56
49516-70	60	49517-33	47	49517-87	70	49518-52	56
49516-71	60	49517-34	48	49517-88	71	49518-53	59
49516-72	60	49517-35	48	49517-89	71	49518-54	59
49516-81	65	49517-36	48	49517-90	71	49518-55	45
49516-82	65	49517-37	48	49517-91	71	49518-56	45
49516-83	66	49517-38	47	49517-92	71	49518-57	37
49516-84	66	49517-39	47	49517-93	71	49518-58	37
49516-85	66	49517-40	48	49517-94	20	49518-81	37
49516-86	66	49517-41	48	49517-95	20	49518-82	37
49516-87	66	49517-42	48	49517-96	18	49518-83	37
49516-88	66	49517-43	48	49517-97	18	49518-84	37
49516-89	67	49517-44	48	49518-02	20	49518-85	42
49516-90	67	49517-45	48	49518-03	20	49518-86	42
49516-91	67	49517-48	49	49518-04	49	49518-87	43
49516-92	67	49517-49	49	49518-05	49	49518-88	43
49516-93	67	49517-50	49	49518-06	64	49518-89	16

# 製品番号 INDEX

製品番号	頁	製品番号	頁	製品番号	頁	製品番号	頁
49518-90	16	49519-52	44	49520-03	29	49527-63	64
49518-91	34	49519-53	44	49520-04	25	49527-64	64
49518-92	34	49519-54	34	49520-05	25	49527-65	41
49518-93	34	49519-55	34	49520-06	27	49527-66	41
49518-94	34	49519-56	34	49520-07	27	49527-67	16
49518-97	56	49519-57	34	49520-08	28	49527-68	16
49519-00	56	49519-58	34	49520-09	28	49527-69	21
49519-01	57	49519-59	34	49520-10	20	49527-70	21
49519-02	57	49519-60	34	49520-11	20	49527-87	19
49519-03	49	49519-61	34	49520-12	23	49527-90	18
49519-04	49	49519-62	35	49520-13	23	49527-92	22
49519-05	53	49519-63	35	49520-14	26	49527-97	21
49519-06	53	49519-64	35	49520-15	26	49528-02	22
49519-07	53	49519-65	35	49520-16	28	49528-03	65
49519-08	53	49519-66	35	49520-17	28	49528-10	62
49519-09	53	49519-67	35	49520-18	57	49528-12	50
49519-10	53	49519-68	35	49520-19	57	49528-13	16
49519-11	53	49519-69	35	49520-20	73	49528-15	26
49519-12	53	49519-70	35	49520-21	73	49528-16	67
49519-17	31	49519-71	35	49520-22	24	49528-17	50
49519-18	31	49519-72	35	49520-23	24	49528-19	68
49519-19	22	49519-73	35	49520-24	71	49528-24	48
49519-20	22	49519-74	35	49520-25	71	49528-25	47
49519-21	73	49519-75	35	49520-26	74	49528-26	43
49519-22	73	49519-76	36	49520-27	74	49528-28	42
49519-23	73	49519-77	36	49520-28	18	49528-30	16
49519-24	73	49519-78	36	49520-30	18	49528-33	33
49519-25	24	49519-79	36	49520-31	23	49528-90	21
49519-26	24	49519-80	36	49520-32	23	49529-12	17
49519-27	40	49519-81	36	49527-43	19	49529-13	22
49519-28	40	49519-82	36	49527-44	19	49529-14	65
49519-32	40	49519-83	36	49527-45	24	49529-15	66
49519-33	40	49519-84	24	49527-46	24	49529-16	66
49519-34	40	49519-85	24	49527-47	50	49529-17	55
49519-35	40	49519-86	26	49527-48	50	49529-18	42
49519-36	40	49519-87	26	49527-49	61	49529-19	30
49519-37	40	49519-88	28	49527-50	61	49529-20	66
49519-38	41	49519-89	28	49527-51	26	49529-21	32
49519-39	41	49519-90	25	49527-52	26	49529-22	32
49519-42	41	49519-91	25	49527-53	28	49529-23	64
49519-43	41	49519-92	27	49527-54	28	49529-24	70
49519-44	41	49519-93	27	49527-55	71	49529-26	20
49519-45	41	49519-94	28	49527-56	71	49529-27	24
49519-46	40	49519-95	28	49527-57	74	49529-28	50
49519-47	40	49519-96	25	49527-58	74	49529-30	70
49519-48	40	49519-97	25	49527-59	67	49529-31	72
49519-49	40	49520-00	27	49527-60	67	49529-32	71
49519-50	44	49520-01	27	49527-61	64	49529-33	69
49519-51	44	49520-02	29	49527-62	64		











- 本記載の製品は、試薬（試験、研究用として用いる化学薬品）としての用途にご利用ください。 ● 本記載価格に、消費税等は含まれておりません。
- 本記載の製品情報は予告なく変更する場合があります。最新情報は、弊社ホームページ「Cica-Web」をご確認ください。



〒103-0022 東京都中央区日本橋室町2丁目2番1号  
TEL : 03-6214-1090  
HP : <https://www.kanto.co.jp>

OBA-01 (202107)