

## List of Ionic Liquids in the Dortmund Data Bank

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The following 37 pages contain the list of 256 ionic liquids currently defined in the Dortmund Data Bank (DDB) including an overview of the stored properties.

### Tetra-n-butylammonium bromide

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Alternative Name: N,N,N-Tributyl-1-butanaminium bromide  
Empirical Formula: C<sub>16</sub>H<sub>36</sub>BrN  
CAS Registry Number: 1643-19-2  
5 sets Activity coefficients at infinite dilution (binary systems)  
54 sets Densities and volumes of mixtures  
12 sets Gas solubilities  
3 sets Liquid-liquid equilibria  
13 sets Pure component properties  
    2 sets Viscosity  
    3 sets Density  
    2 sets Melting Point  
    4 sets Molar Heat Capacity (cP)  
    1 set Heat of Fusion  
    1 set Transition Temperature  
1 set Thermodynamic data for polymer containing systems

### Tetrahexylammonium perchlorate

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Alternative Name: Tetrahexylammoniumperchlorat  
Empirical Formula: C<sub>24</sub>H<sub>52</sub>ClNO<sub>4</sub>  
CAS Registry Number: 4656-81-9  
2 sets Pure component properties  
    1 set Density  
    1 set Melting Point

### Tetra-N-butylammonium picrate

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Alternative Name: Tetra-N-butylammoniumpikrat  
Empirical Formula: C<sub>22</sub>H<sub>38</sub>N<sub>4</sub>O<sub>7</sub>  
CAS Registry Number: 914-45-4  
5 sets Activity coefficients at infinite dilution (binary systems)  
1 set Azeotropic/zeotropic information  
26 sets Densities and volumes of mixtures  
1 set Pure component properties  
    1 set Viscosity  
2 sets Vapor-liquid equilibria

### Tetrapentylammonium bromide

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Alternative Name: Tetraamylammonium bromide  
Empirical Formula: C<sub>20</sub>H<sub>44</sub>BrN  
CAS Registry Number: 866-97-7  
8 sets Densities and volumes of mixtures  
2 sets Pure component properties  
    1 set Density  
    1 set Melting Point  
1 set Thermodynamic data for polymer containing systems

### Tetra-N-hexylammoniumbromide

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Alternative Name: Tetra-N-hexylammoniumbromid  
Empirical Formula: C<sub>24</sub>H<sub>52</sub>BrN  
CAS Registry Number: 4328-13-6  
7 sets Densities and volumes of mixtures  
2 sets Pure component properties  
    2 sets Density

### Tetra-N-butylammoniumiodide

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Alternative Name: Tetra-N-butylammoniumiodid  
Empirical Formula: C<sub>16</sub>H<sub>36</sub>IN  
CAS Registry Number: 311-28-4  
16 sets Densities and volumes of mixtures

10 sets Gas solubilities  
1 set Pure component properties  
1 set Density

### Tetra-N-pentylammoniumiodide

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Alternative Name: Tetra-N-pentylammoniumiodid  
Empirical Formula: C<sub>20</sub>H<sub>44</sub>IN  
CAS Registry Number: 2498-20-6  
1 set Pure component properties  
1 set Density

### Tetra-iso-pentylammoniumiodide

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Alternative Name: Tetra-i-amylammoniumiodide  
Empirical Formula: C<sub>20</sub>H<sub>44</sub>IN  
CAS Registry Number:  
1 set Pure component properties  
1 set Density

### Tetra-N-hexylammoniumiodide

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Alternative Name: Tetra-N-hexylammoniumiodid  
Empirical Formula: C<sub>24</sub>H<sub>52</sub>IN  
CAS Registry Number: 2138-24-1  
1 set Pure component properties  
1 set Density

### Tetra-N-heptylammoniumiodide

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Alternative Name: Tetra-N-heptylammoniumiodid  
Empirical Formula: C<sub>28</sub>H<sub>60</sub>IN  
CAS Registry Number: 3535-83-9  
1 set Pure component properties  
1 set Density

### Tetra-N-pentylammoniumthiocyanate

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Alternative Name: Tetra-N-pentylammoniumthiocyanat  
Empirical Formula: C<sub>21</sub>H<sub>44</sub>N<sub>2</sub>S  
CAS Registry Number: 3475-60-3  
1 set Pure component properties  
1 set Density

### Tetra-N-pentylammoniumnitrate

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Alternative Name: Tetra-N-pentylammoniumnitrat  
Empirical Formula: C<sub>20</sub>H<sub>44</sub>N<sub>2</sub>O<sub>3</sub>  
CAS Registry Number: 682-02-0  
1 set Pure component properties  
1 set Density

### Tetra-N-hexylammoniumtetrafluoroborate

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Alternative Name: Tetra-N-hexylammoniumtetrafluoroborat  
Empirical Formula: C<sub>24</sub>H<sub>52</sub>BF<sub>4</sub>N  
CAS Registry Number: 15553-50-1  
1 set Pure component properties  
1 set Density

### 1-Butyl-3-methylimidazolium hexafluorophosphate

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Alternative Name: [BMIM] hexafluorophosphate  
Empirical Formula: C<sub>8</sub>H<sub>15</sub>F<sub>6</sub>N<sub>2</sub>P  
CAS Registry Number: 174501-64-5

4 sets Activity coefficients at infinite dilution (binary systems)  
10 sets Critical data of mixtures  
17 sets Densities and volumes of mixtures  
81 sets Gas solubilities  
55 sets Liquid-liquid equilibria  
43 sets Pure component properties  
    7 sets Viscosity  
    10 sets Density  
    6 sets Melting Point  
    1 set Molar Heat Capacity (cP)  
    2 sets Heat of Fusion  
    2 sets Surface Tension  
    5 sets Transition Temperature  
    1 set Ideal Gas Heat Capacity  
    9 sets Speed of Sound  
3 sets Solid-liquid equilibria for systems without salts  
21 sets Vapor-liquid equilibria

### [EMIM] bis(trifluoromethylsulfonyl)imide

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Alternative Name: EMIM: 1-ethyl-3-methyl-imidazolium  
Empirical Formula: C<sub>8</sub>H<sub>11</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number: 174899-82-2  
370 sets Activity coefficients at infinite dilution (binary systems)  
    7 sets Activity coefficients at infinite dilution (ternary systems)  
57 sets Azeotropic/zeotropic information  
    4 sets Densities and volumes of mixtures  
24 sets Gas solubilities  
10 sets Heats of mixing  
13 sets Liquid-liquid equilibria  
19 sets Pure component properties  
    2 sets Viscosity  
    1 set Vapor Pressure  
    5 sets Density  
    6 sets Melting Point  
    1 set Molar Heat Capacity (cP)  
    2 sets Heat of Vaporization  
    1 set Speed of Sound  
    1 set Entropy of Vaporization  
94 sets Vapor-liquid equilibria

### 4-Methyl-N-butylpyridinium tetrafluoroborate

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Alternative Name: Pyridinium tetrafluoroborate, 4-methyl,N-butyl,  
Empirical Formula: C<sub>10</sub>H<sub>16</sub>BF<sub>4</sub>N  
CAS Registry Number: 343952-33-0  
152 sets Activity coefficients at infinite dilution (binary systems)  
    3 sets Densities and volumes of mixtures  
14 sets Liquid-liquid equilibria  
2 sets Pure component properties  
    1 set Viscosity  
    1 set Density

### 1-Butyl-3-methylimidazolium triiodide

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Alternative Name: [BMIM] triiodide  
Empirical Formula: C<sub>8</sub>H<sub>15</sub>I<sub>3</sub>N<sub>2</sub>  
CAS Registry Number: 138245-32-6  
1 set Liquid-liquid equilibria

### 1-Ethyl-3-methylimidazolium triiodide

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Alternative Name: [EMIM] - triiodide  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>I<sub>3</sub>N<sub>2</sub>  
CAS Registry Number: 287097-41-0

1 set Liquid-liquid equilibria

### **[MMIM] bis(trifluoromethylsulfonyl)imide**

Alternative Name: 1-Methyl-3-methyl-imidazolium bis-trifluoromethylsulfonylimide

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

CAS Registry Number: 174899-81-1

165 sets Activity coefficients at infinite dilution (binary systems)

2 sets Azeotropic/zeotropic information

1 set Pure component properties

1 set Density

2 sets Vapor-liquid equilibria

### **1-Butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide**

Alternative Name: [BMIM] bis(trifluoromethylsulfonyl)imide

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

CAS Registry Number: 174899-83-3

406 sets Activity coefficients at infinite dilution (binary systems)

7 sets Activity coefficients at infinite dilution (ternary systems)

23 sets Azeotropic/zeotropic information

4 sets Critical data of mixtures

2 sets Densities and volumes of mixtures

6 sets Gas solubilities

11 sets Liquid-liquid equilibria

52 sets Pure component properties

2 sets Viscosity

2 sets Vapor Pressure

12 sets Density

5 sets Melting Point

8 sets Molar Heat Capacity (cP)

3 sets Heat of Vaporization

2 sets Heat of Fusion

2 sets Surface Tension

3 sets Transition Temperature

6 sets Molar Heat Capacity (cV)

6 sets Speed of Sound

1 set Entropy of Vaporization

50 sets Vapor-liquid equilibria

### **[EMIM] ethylsulfate**

Alternative Name: 1-Ethyl-3-methylimidazolium ethylsulfate

Empirical Formula: C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>S

CAS Registry Number: 342573-75-5

273 sets Activity coefficients at infinite dilution (binary systems)

2 sets Azeotropic/zeotropic information

19 sets Densities and volumes of mixtures

2 sets Liquid-liquid equilibria

7 sets Pure component properties

1 set Viscosity

4 sets Density

1 set Surface Tension

1 set Speed of Sound

9 sets Vapor-liquid equilibria

### **N-Butylpyridinium tetrafluoroborate**

Alternative Name: [N-Bupy] tetrafluoroborate

Empirical Formula: C<sub>9</sub>H<sub>14</sub>BF<sub>4</sub>N

CAS Registry Number: 203389-28-0

11 sets Pure component properties

1 set Viscosity

3 sets Density

2 sets Melting Point

- 2 sets Heat of Fusion
- 1 set Surface Tension
- 2 sets Transition Temperature
- 3 sets Vapor-liquid equilibria

### [EDMIM] bis(trifluoromethylsulfonyl)imide

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Alternative Name: 1,2-Dimethyl-3-ethylimidazolium bis(trifluoromethyl-sulfonyl)imide  
Empirical Formula: C<sub>9</sub>H<sub>13</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number: 174899-90-2  
152 sets Activity coefficients at infinite dilution (binary systems)

- 1 set Liquid-liquid equilibria
- 2 sets Pure component properties
  - 2 sets Melting Point

### 1-n-Octyl-3-methylimidazolium hexafluorophosphate

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Alternative Name: [C8-MIM] Hexafluorophosphate  
Empirical Formula: C<sub>12</sub>H<sub>23</sub>F<sub>6</sub>N<sub>2</sub>P  
CAS Registry Number: 304680-36-2  
3 sets Activity coefficients at infinite dilution (binary systems)

- 1 set Gas solubilities
- 4 sets Liquid-liquid equilibria
- 13 sets Pure component properties
  - 4 sets Viscosity
  - 4 sets Density
  - 2 sets Surface Tension
  - 3 sets Transition Temperature
- 3 sets Vapor-liquid equilibria

### 1-n-Octyl-3-methylimidazolium tetrafluoroborate

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Alternative Name: [C8MIM] Tetrafluoroborate  
Empirical Formula: C<sub>12</sub>H<sub>23</sub>BF<sub>4</sub>N<sub>2</sub>  
CAS Registry Number: 244193-52-0  
283 sets Activity coefficients at infinite dilution (binary systems)

- 17 sets Azeotropic/zeotropic information
- 6 sets Densities and volumes of mixtures
- 2 sets Gas solubilities
- 5 sets Liquid-liquid equilibria
- 5 sets Pure component properties
  - 1 set Viscosity
  - 1 set Density
  - 1 set Molar Heat Capacity (cP)
  - 1 set Transition Temperature
  - 1 set Speed of Sound
- 20 sets Vapor-liquid equilibria

### 1-Butyl-3-methylimidazolium nitrate

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Alternative Name: [BMIM] nitrate  
Empirical Formula: C<sub>8</sub>H<sub>17</sub>N<sub>3</sub>O<sub>3</sub>  
CAS Registry Number: 179075-88-8

- 1 set Pure component properties
  - 1 set Density
- 3 sets Vapor-liquid equilibria

### [EMIM] - hexafluorophosphate

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Alternative Name: 1-Ethyl-3-methyl-imidazolium-hexafluorophosphate  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>F<sub>6</sub>N<sub>2</sub>P  
CAS Registry Number: 155371-19-0

- 14 sets Liquid-liquid equilibria
- 7 sets Pure component properties
  - 1 set Viscosity

5 sets Melting Point  
1 set Heat of Fusion  
22 sets Solid-liquid equilibria for systems without salts  
26 sets Vapor-liquid equilibria

### 1,3-Dimethyl-imidazolium methylsulfate

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Alternative Name: [MMIM](+) methylsulfate (-)  
Empirical Formula: C<sub>6</sub>H<sub>12</sub>N<sub>2</sub>O<sub>4</sub>S  
CAS Registry Number: 97345-90-9  
56 sets Activity coefficients at infinite dilution (binary systems)  
8 sets Densities and volumes of mixtures  
13 sets Liquid-liquid equilibria  
7 sets Pure component properties  
1 set Viscosity  
3 sets Density  
1 set Melting Point  
1 set Surface Tension  
1 set Speed of Sound  
2 sets Solid-liquid equilibria for systems without salts

### N-Ethylpyridinium bis(trifluoromethylsulfonyl)imide

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Alternative Name: [EPY] BTI  
Empirical Formula: C<sub>9</sub>H<sub>10</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number: 712354-97-7  
148 sets Activity coefficients at infinite dilution (binary systems)  
1 set Pure component properties  
1 set Density

### Tetrabutylammonium chloride

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Alternative Name: Tetrabutylammoniumchlorid  
Empirical Formula: C<sub>16</sub>H<sub>36</sub>ClN  
CAS Registry Number: 1112-67-0  
5 sets Activity coefficients at infinite dilution (binary systems)  
11 sets Densities and volumes of mixtures

### 1-Ethyl-3-methyl-1-imidazolium tetrafluoroborate

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Alternative Name: [EMIM]-tetrafluoroborate  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>BF<sub>4</sub>N<sub>2</sub>  
CAS Registry Number: 143314-16-3  
45 sets Activity coefficients at infinite dilution (binary systems)  
4 sets Azeotropic/zeotropic information  
7 sets Densities and volumes of mixtures  
1 set Gas solubilities  
1 set Liquid-liquid equilibria  
16 sets Pure component properties  
1 set Viscosity  
1 set Kinematic Viscosity  
1 set Density  
7 sets Melting Point  
2 sets Molar Heat Capacity (cP)  
3 sets Heat of Fusion  
1 set Transition Temperature  
10 sets Vapor-liquid equilibria

### 1-Butylpyridinium bis(trifluoromethylsulfonyl)imide

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Alternative Name: N-Butylpyridinium bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C<sub>11</sub>H<sub>14</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number: 187863-42-9  
5 sets Pure component properties  
1 set Density

- 1 set Melting Point
- 3 sets Molar Heat Capacity (cP)

### 1-Butyl-3-methylimidazolium tetrafluoroborate

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Alternative Name: [BMIM]-tetrafluoroborate  
Empirical Formula: C<sub>8</sub>H<sub>15</sub>BF<sub>4</sub>N<sub>2</sub>  
CAS Registry Number: 174501-65-6  
134 sets Activity coefficients at infinite dilution (binary systems)  
    7 sets Azeotropic/zeotropic information  
    9 sets Densities and volumes of mixtures  
121 sets Gas solubilities  
24 sets Liquid-liquid equilibria  
21 sets Pure component properties  
    4 sets Viscosity  
    7 sets Density  
    4 sets Molar Heat Capacity (cP)  
    6 sets Speed of Sound  
28 sets Vapor-liquid equilibria

### [MMIM] methoxyethylsulfate

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Alternative Name: 1-Methyl-3-methyl-imidazolium methoxyethylsulfate  
Empirical Formula: C<sub>8</sub>H<sub>16</sub>N<sub>2</sub>O<sub>5</sub>S  
CAS Registry Number:  
56 sets Activity coefficients at infinite dilution (binary systems)  
    1 set Pure component properties  
        1 set Density

### 1-Butyl-3-methylimidazolium chloride

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Alternative Name: [BMIM]-chloride  
Empirical Formula: C<sub>8</sub>H<sub>15</sub>ClN<sub>2</sub>  
CAS Registry Number: 79917-90-1  
3 sets Activity coefficients at infinite dilution (binary systems)  
3 sets Azeotropic/zeotropic information  
3 sets Liquid-liquid equilibria  
3 sets Octanol-Water partition coefficients  
9 sets Pure component properties  
    2 sets Density  
    4 sets Melting Point  
    2 sets Heat of Fusion  
    1 set Transition Temperature  
18 sets Solid-liquid equilibria for systems without salts  
6 sets Vapor-liquid equilibria

### Tetra-N-butylammonium methanesulfonate

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Alternative Name: Methanesulfonic acid tetrabutylammoniumsalt  
Empirical Formula: C<sub>17</sub>H<sub>39</sub>NO<sub>3</sub>S  
CAS Registry Number: 65411-49-6  
11 sets Activity coefficients at infinite dilution (binary systems)

### Tetra-N-butylammonium trifluoromethanesulfonate

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Alternative Name: Trifluoromethanesulfonic acid tetrabutylammonium salt  
Empirical Formula: C<sub>17</sub>H<sub>36</sub>F<sub>3</sub>NO<sub>3</sub>S  
CAS Registry Number: 35895-70-6  
11 sets Activity coefficients at infinite dilution (binary systems)

### Tetra-N-butylammonium benzenesulfonate

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Alternative Name: Benzenesulfonic acid tetrabutylammoniumsalt  
Empirical Formula: C<sub>22</sub>H<sub>41</sub>NO<sub>3</sub>S  
CAS Registry Number:

6 sets Activity coefficients at infinite dilution (binary systems)

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### Tetra-N-butylammonium pentafluoroenzenesulfonate

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Alternative Name: Pentafluorobenzenesulfonic acid tetrabutylammoniumsalt  
Empirical Formula: C<sub>22</sub>H<sub>36</sub>F<sub>5</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

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### Tetra-N-butylammonium butanesulfonate

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Alternative Name: Butanesulfonic acid tetrabutylammoniumsalt  
Empirical Formula: C<sub>20</sub>H<sub>45</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

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### Tetra-N-butylammonium perfluorobutanesulfonate

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Alternative Name: Perfluorobutanesulfonic acid tetrabutylammoniumsalt  
Empirical Formula: C<sub>20</sub>H<sub>36</sub>F<sub>9</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

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### Tetra-N-butylammonium octanesulfonate

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Alternative Name: Octanesulfonic acid tetrabutylammoniumsalt  
Empirical Formula: C<sub>24</sub>H<sub>53</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

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### Tetra-N-butylammonium perfluorooctanesulfonate

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Alternative Name: Perfluorooctanesulfonic acid tetrabutylammoniumsalt  
Empirical Formula: C<sub>24</sub>H<sub>36</sub>F<sub>17</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

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### Tri-N-butylmethylammonium butanesulfonate

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Alternative Name: Butanesulfonic acid tributylmethylammoniumsalt  
Empirical Formula: C<sub>17</sub>H<sub>39</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

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### Tri-N-butylmethylammonium perfluorobutanesulfonate

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Alternative Name: Perfluorobutanesulfonic acid tributylmethylammoniumsalt  
Empirical Formula: C<sub>17</sub>H<sub>30</sub>F<sub>9</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

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### Tri-N-butylmethylammonium octanesulfonate

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Alternative Name: Octanesulfonic acid trbutylmethylammoniumsalt  
Empirical Formula: C<sub>21</sub>H<sub>47</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

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### Tri-N-butylmethylammonium perfluorooctanesulfonate

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Alternative Name: Perfluorooctanesulfonic acid tributylmethylammoniumsalt  
Empirical Formula: C<sub>21</sub>H<sub>30</sub>F<sub>17</sub>NO<sub>3</sub>S  
CAS Registry Number:  
6 sets Activity coefficients at infinite dilution (binary systems)

### 1-n-Pentyl-3-methylimidazolium hexafluorophosphate

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Empirical Formula: C<sub>9</sub>H<sub>17</sub>F<sub>6</sub>N<sub>2</sub>P  
CAS Registry Number:  
4 sets Liquid-liquid equilibria  
2 sets Pure component properties  
1 set Density  
1 set Transition Temperature

### 1-Hexyl-3-methylimidazolium hexafluorophosphate

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Alternative Name: [C6MIM] hexafluorophosphate  
Empirical Formula: C<sub>10</sub>H<sub>19</sub>F<sub>6</sub>N<sub>2</sub>P  
CAS Registry Number: 304680-35-1  
43 sets Activity coefficients at infinite dilution (binary systems)  
8 sets Densities and volumes of mixtures  
1 set Gas solubilities  
19 sets Liquid-liquid equilibria  
13 sets Pure component properties  
2 sets Viscosity  
6 sets Density  
2 sets Surface Tension  
3 sets Transition Temperature  
10 sets Vapor-liquid equilibria

### 1-n-Heptyl-3-methylimidazolium hexafluorophosphate

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Empirical Formula: C<sub>11</sub>H<sub>21</sub>F<sub>6</sub>N<sub>2</sub>P  
CAS Registry Number:  
4 sets Liquid-liquid equilibria  
2 sets Pure component properties  
1 set Density  
1 set Transition Temperature

### 1-Butyl-3-methylimidazolium iodide

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Alternative Name: [BMIM] Iodide  
Empirical Formula: C<sub>8</sub>H<sub>15</sub>IN<sub>2</sub>  
CAS Registry Number: 65039-05-6  
5 sets Pure component properties  
1 set Viscosity  
2 sets Density  
1 set Melting Point  
1 set Surface Tension

### 1,3-Dimethylimidazolium tetrachloroaluminate

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Alternative Name: [C1MIM] Tetrachloroaluminate  
Empirical Formula: C<sub>5</sub>H<sub>10</sub>AlCl<sub>4</sub>N<sub>2</sub>  
CAS Registry Number:  
No data found.

### 1-Ethyl-3-methylimidazolium tetrachloroaluminate

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Alternative Name: [C2MIM] Tetrachloroaluminate  
Empirical Formula: C<sub>6</sub>H<sub>12</sub>AlCl<sub>4</sub>N<sub>2</sub>  
CAS Registry Number:  
No data found.

### 1-Propyl-3-methylimidazolium tetrachloroaluminate

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Alternative Name: [C3MIM] Tetrachloroaluminate  
Empirical Formula: C<sub>7</sub>H<sub>14</sub>AlCl<sub>4</sub>N<sub>2</sub>  
CAS Registry Number:

No data found.

### 1-Butyl-3-methylimidazolium tetrachloroaluminate

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Alternative Name: [BMIM] Tetrachloroaluminate  
Empirical Formula: C<sub>8</sub>H<sub>16</sub>AlCl<sub>4</sub>N<sub>2</sub>  
CAS Registry Number:  
No data found.

### 1,3-Dibutylimidazolium tetrachloroaluminate

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Alternative Name: [C4C4LM] Tetrachloroaluminate  
Empirical Formula: C<sub>11</sub>H<sub>22</sub>AlCl<sub>4</sub>N<sub>2</sub>  
CAS Registry Number:  
No data found.

### 1-Ethyl-3-methylimidazolium nitrate

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Alternative Name: [C2MIM] Nitrate  
Empirical Formula: C<sub>6</sub>H<sub>13</sub>N<sub>3</sub>O<sub>3</sub>  
CAS Registry Number:  
No data found.

### 1-Ethyl-3-methylimidazolium nitrite

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Alternative Name: [C2MIM] Nitrite  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>  
CAS Registry Number:  
No data found.

### 1-Hexyl-3-methylimidazolium chloride

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Alternative Name: [C6MIM] Chloride  
Empirical Formula: C<sub>10</sub>H<sub>19</sub>ClN<sub>2</sub>  
CAS Registry Number: 171058-17-6  
3 sets Densities and volumes of mixtures  
7 sets Pure component properties  
    2 sets Viscosity  
    3 sets Density  
    1 set Surface Tension  
    1 set Transition Temperature

### 1-Octyl-3-methylimidazolium chloride

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Alternative Name: [C8MIM] Chloride  
Empirical Formula: C<sub>12</sub>H<sub>23</sub>ClN<sub>2</sub>  
CAS Registry Number: 64697-40-1  
45 sets Activity coefficients at infinite dilution (binary systems)  
2 sets Azeotropic/zeotropic information  
28 sets Liquid-liquid equilibria  
3 sets Octanol-Water partition coefficients  
11 sets Pure component properties  
    2 sets Viscosity  
    4 sets Density  
    1 set Melting Point  
    1 set Heat of Fusion  
    1 set Surface Tension  
    2 sets Transition Temperature  
2 sets Vapor-liquid equilibria

### Tetra-N-butylammonium ethanesulfonate

---

Alternative Name: Ethanesulfonic acid tetrabutylammoniumsalt  
Empirical Formula: C<sub>18</sub>H<sub>41</sub>NO<sub>3</sub>S  
CAS Registry Number:

5 sets Activity coefficients at infinite dilution (binary systems)

### Tetra-N-butylammonium 4-toluenesulfonate

---

Alternative Name: 4-Toluenesulfonic acid tetrabutylammoniumsalt

Empirical Formula: C<sub>23</sub>H<sub>43</sub>N<sub>3</sub>O<sub>3</sub>S

CAS Registry Number:

5 sets Activity coefficients at infinite dilution (binary systems)

### Tetra-N-butylammonium nitrite

---

Alternative Name: Tetrabutylammonium nitrite

Empirical Formula: C<sub>16</sub>H<sub>36</sub>N<sub>2</sub>O<sub>2</sub>

CAS Registry Number: 26501-54-2

5 sets Activity coefficients at infinite dilution (binary systems)

### Tetra-N-butylammonium tetra-N-butylborate

---

Alternative Name: Tetrabutylammonium tetrabutylborate

Empirical Formula: C<sub>32</sub>H<sub>72</sub>BN

CAS Registry Number: 23231-91-6

5 sets Activity coefficients at infinite dilution (binary systems)

### Tetra-N-butylammonium sulfamate

---

Alternative Name: Tetrabutylammonium amidosulfonate

Empirical Formula: C<sub>16</sub>H<sub>38</sub>N<sub>2</sub>O<sub>3</sub>S

CAS Registry Number:

5 sets Activity coefficients at infinite dilution (binary systems)

### Tetra-N-butylammonium nitrate

---

Alternative Name: Tetrabutylammonium nitrate

Empirical Formula: C<sub>16</sub>H<sub>36</sub>N<sub>2</sub>O<sub>3</sub>

CAS Registry Number: 1941-27-1

5 sets Activity coefficients at infinite dilution (binary systems)

6 sets Densities and volumes of mixtures

### Tetra-N-butylammonium thiocyanate

---

Alternative Name: Tetrabutylammonium thiocyanate

Empirical Formula: C<sub>17</sub>H<sub>36</sub>N<sub>2</sub>S

CAS Registry Number: 3674-54-2

5 sets Activity coefficients at infinite dilution (binary systems)

### Tetra-N-butylammonium pentacyanopropenide

---

Alternative Name: Tetrabutylammonium pentacyanopropenide

Empirical Formula: C<sub>24</sub>H<sub>36</sub>N<sub>6</sub>

CAS Registry Number:

5 sets Activity coefficients at infinite dilution (binary systems)

### 1-Ethyl-3-methylimidazolium chloride

---

Alternative Name: [EMIM] - chloride

Empirical Formula: C<sub>6</sub>H<sub>11</sub>ClN<sub>2</sub>

CAS Registry Number: 65039-09-0

9 sets Densities and volumes of mixtures

3 sets Pure component properties

3 sets Melting Point

4 sets Solid-liquid equilibria for systems without salts

1 set Vapor-liquid equilibria

### Pyridinium ethoxyethylsulfate

---

Empirical Formula: C<sub>9</sub>H<sub>15</sub>N<sub>0</sub>S<sub>5</sub>  
CAS Registry Number:  
56 sets Activity coefficients at infinite dilution (binary systems)  
2 sets Azeotropic/zeotropic information  
1 set Pure component properties  
1 set Density  
2 sets Vapor-liquid equilibria

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

---

Empirical Formula: C<sub>11</sub>H<sub>20</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number:  
60 sets Activity coefficients at infinite dilution (binary systems)  
6 sets Pure component properties  
1 set Viscosity  
1 set Density  
3 sets Melting Point  
1 set Entropy of Fusion

### 1-Methyl-4-octylpyridinium chloride

---

Empirical Formula: C<sub>14</sub>H<sub>24</sub>ClN  
CAS Registry Number:  
1 set Different thermodynamic properties

### 1-Methyl-4-octylpyridinium bromide

---

Empirical Formula: C<sub>14</sub>H<sub>24</sub>BrN  
CAS Registry Number:  
1 set Different thermodynamic properties

### 1-Methyl-4-octylpyridinium iodide

---

Empirical Formula: C<sub>14</sub>H<sub>24</sub>IN  
CAS Registry Number:  
1 set Different thermodynamic properties

### [EMIM] - hexafluoroniobate

---

Alternative Name: 1-Ethyl-3-methyl-imidazolium-hexafluoroniobate  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>F<sub>6</sub>N<sub>2</sub>Nb  
CAS Registry Number: 442911-14-0  
4 sets Pure component properties  
2 sets Viscosity  
1 set Density  
1 set Melting Point

### [EMIM] - hexafluorotantalate

---

Alternative Name: 1-Ethyl-3-methyl-imidazolium-hexafluorotantalate  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>F<sub>6</sub>N<sub>2</sub>Ta  
CAS Registry Number: 442911-13-9  
2 sets Pure component properties  
1 set Density  
1 set Melting Point

### 1-Methyl-3-methyl-imidazolium dimethylphosphate

---

Alternative Name: [MMIM] dimethylphosphate  
Empirical Formula: C<sub>7</sub>H<sub>15</sub>N<sub>2</sub>O<sub>4</sub>P  
CAS Registry Number:  
59 sets Activity coefficients at infinite dilution (binary systems)  
5 sets Azeotropic/zeotropic information  
1 set Pure component properties

1 set Density  
18 sets Vapor-liquid equilibria

### 1-Decyl-3-methylimidazolium chloride

---

Alternative Name: [C10MIM] Chloride  
Empirical Formula: C<sub>14</sub>H<sub>27</sub>ClN<sub>2</sub>  
CAS Registry Number: 171058-18-7  
3 sets Liquid-liquid equilibria  
3 sets Octanol-Water partition coefficients  
12 sets Pure component properties  
2 sets Melting Point  
2 sets Heat of Fusion  
4 sets Transition Temperature  
4 sets Heat of Transition  
10 sets Solid-liquid equilibria for systems without salts

### [OMIM] bis(trifluoromethylsulfonyl)imide

---

Alternative Name: OMIM: 1-octyl-3-methyl-imidazolium  
Empirical Formula: C<sub>14</sub>H<sub>23</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number: 178631-04-4  
119 sets Activity coefficients at infinite dilution (binary systems)  
2 sets Gas solubilities  
2 sets Liquid-liquid equilibria  
11 sets Pure component properties  
1 set Vapor Pressure  
2 sets Density  
1 set Molar Heat Capacity (cP)  
2 sets Heat of Vaporization  
1 set Surface Tension  
2 sets Transition Temperature  
1 set Speed of Sound  
1 set Entropy of Vaporization

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

---

Alternative Name: [C6MIM] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C<sub>12</sub>H<sub>19</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number: 382150-50-7  
469 sets Activity coefficients at infinite dilution (binary systems)  
4 sets Azeotropic/zeotropic information  
1 set Critical data of mixtures  
21 sets Densities and volumes of mixtures  
3 sets Gas solubilities  
10 sets Liquid-liquid equilibria  
61 sets Pure component properties  
1 set Viscosity  
1 set Vapor Pressure  
16 sets Density  
1 set Melting Point  
37 sets Molar Heat Capacity (cP)  
2 sets Heat of Vaporization  
1 set Transition Temperature  
1 set Speed of Sound  
1 set Entropy of Vaporization  
8 sets Vapor-liquid equilibria

### 1-Hexyl-3-methylimidazolium tetrafluoroborate

---

Alternative Name: [C6MIM] tetrafluoroborate  
Empirical Formula: C<sub>10</sub>H<sub>19</sub>BF<sub>4</sub>N<sub>2</sub>  
CAS Registry Number: 244193-50-8  
68 sets Activity coefficients at infinite dilution (binary systems)  
1 set Critical data of mixtures

- 1 set Densities and volumes of mixtures
- 2 sets Gas solubilities
- 25 sets Liquid-liquid equilibria
- 4 sets Pure component properties
  - 2 sets Density
  - 1 set Molar Heat Capacity (cP)
  - 1 set Transition Temperature
- 8 sets Vapor-liquid equilibria

### 1-Dodecyl-3-methylimidazolium chloride

---

- Alternative Name: [C12MIM] Chloride  
Empirical Formula: C16H31ClN2  
CAS Registry Number: 114569-84-5
- 4 sets Liquid-liquid equilibria
  - 3 sets Octanol-Water partition coefficients
  - 20 sets Pure component properties
    - 2 sets Melting Point
    - 2 sets Heat of Fusion
    - 8 sets Transition Temperature
    - 8 sets Heat of Transition
  - 46 sets Solid-liquid equilibria for systems without salts

### [PMIM] bis(trifluoromethylsulfonyl)imide

---

- Alternative Name: 1-Propyl-3-methyl-imidazolium bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C9H13F6N3O4S2  
CAS Registry Number:
- 1 set Gas solubilities
  - 20 sets Pure component properties
    - 15 sets Density
    - 5 sets Speed of Sound

### [PMIM] - hexafluorophosphate

---

- Alternative Name: 1-Propyl-3-methyl-imidazolium-hexafluorophosphate  
Empirical Formula: C7H13F6N2P  
CAS Registry Number:
- 1 set Gas solubilities
  - 2 sets Pure component properties
    - 2 sets Melting Point

### C8F13MIMTf2N

---

- Alternative Name: 1-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-3-methyl-imidazolium bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C14H10F19N3O4S2  
CAS Registry Number:
- 2 sets Gas solubilities

### 1-Butyl-3-phenylimidazoliumbis[trifluoromethylsulfonyl]amide

---

- Empirical Formula: C15H17F6N3O4S2  
CAS Registry Number:
- 1 set Gas solubilities

### 1,4-Dibutyl-3-phenylimidazoliumbis[trifluoromethylsulfonyl]amide

---

- Empirical Formula: C19H25F6N3O4S2  
CAS Registry Number:
- 1 set Gas solubilities

### 1-Butyl-3-methylimidazolium bromide

---

- Alternative Name: [BMIM]-bromide

Empirical Formula: C<sub>8</sub>H<sub>15</sub>BrN<sub>2</sub>  
CAS Registry Number: 85100-77-2  
5 sets Azeotropic/zeotropic information  
16 sets Densities and volumes of mixtures  
3 sets Different thermodynamic properties  
4 sets Pure component properties  
    1 set Viscosity  
    1 set Density  
    2 sets Molar Heat Capacity (cP)  
11 sets Vapor-liquid equilibria

### 1,3-Dimethylimidazolium chloride

---

Alternative Name: [MMIM] Chloride  
Empirical Formula: C<sub>5</sub>H<sub>9</sub>ClN<sub>2</sub>  
CAS Registry Number: 79917-88-7  
1 set Pure component properties  
    1 set Melting Point  
1 set Solid-liquid equilibria for systems without salts

### 1-Methyl-3-propylimidazolium chloride

---

Alternative Name: [PMIM] Chloride  
Empirical Formula: C<sub>7</sub>H<sub>13</sub>ClN<sub>2</sub>  
CAS Registry Number: 79917-89-8  
3 sets Pure component properties  
    3 sets Melting Point

### 1,3-Dibutylimidazolium chloride

---

Alternative Name: [BBIM] Chloride  
Empirical Formula: C<sub>11</sub>H<sub>21</sub>ClN<sub>2</sub>  
CAS Registry Number: 83608-75-7  
1 set Pure component properties  
    1 set Melting Point

### 1,2,3-Trimethylimidazolium chloride

---

Alternative Name: 2-Methyl-[MMIM] Chloride  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>ClN<sub>2</sub>  
CAS Registry Number:  
1 set Pure component properties  
    1 set Melting Point

### 1-Ethyl-3-methylimidazolium bromide

---

Alternative Name: [EMIM] bromide  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>BrN<sub>2</sub>  
CAS Registry Number: 65039-08-9  
4 sets Pure component properties  
    4 sets Melting Point

### 1-Ethyl-3-methylimidazolium iodide

---

Alternative Name: [EMIM] iodide  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>IN<sub>2</sub>  
CAS Registry Number: 35935-34-3  
4 sets Pure component properties  
    4 sets Melting Point

### 1-i-Propyl-3-methylimidazolium iodide

---

Alternative Name: [IPMIM] iodide  
Empirical Formula: C<sub>7</sub>H<sub>13</sub>IN<sub>2</sub>  
CAS Registry Number:

2 sets Pure component properties  
2 sets Melting Point

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

---

Alternative Name: [DMEIM] chloride  
Empirical Formula: C7H13ClN2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

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

---

Alternative Name: [DMEIM] bromide  
Empirical Formula: C7H13BrN2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

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

---

Alternative Name: [DMPIM] chloride  
Empirical Formula: C8H15ClN2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### 2,4,5-Trimethylimidazolium chloride

---

Empirical Formula: C6H11ClN2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### Pentamethylimidazolium iodide

---

Empirical Formula: C8H15IN2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### Tetraethylammonium tetrafluoroborate

---

Empirical Formula: C8H20BF4N  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### Tetraethylammonium hexafluorophosphate

---

Empirical Formula: C8H20F6NP  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### 1-i-Propyl-3-methyl-imidazolium-hexafluorophosphate

---

Alternative Name: [iPMIM] - hexafluorophosphate  
Empirical Formula: C7H13F6N2P  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

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

---

Alternative Name: [DMEIM] hexafluorophosphate  
Empirical Formula: C7H13F6N2P  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

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

---

Alternative Name: [DMPIM] hexafluorophosphate  
Empirical Formula: C8H15F6N2P  
CAS Registry Number:  
5 sets Pure component properties  
1 set Viscosity  
4 sets Melting Point

### Pentamethylimidazolium hexafluorophosphate

---

Empirical Formula: C8H15F6N2P  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### 1-Ethyl-3-methylimidazolium hexafluoroarsenate

---

Alternative Name: [EMIM] hexafluoroarsenate  
Empirical Formula: C6H11AsF6N2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### Tetraethylammonium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: TEA bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C10H20F6N2O4S2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### Tetra-n-butylammonium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: TBA bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C18H36F6N2O4S2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### 1-i-Propyl-3-methyl-imidazolium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: [iPMIM] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C9H13F6N3O4S2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

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

---

Alternative Name: [PDMIM] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C10H15F6N3O4S2  
CAS Registry Number: 169051-76-7  
3 sets Liquid-liquid equilibria  
6 sets Pure component properties  
1 set Viscosity  
1 set Density  
4 sets Melting Point

1 set Vapor-liquid equilibria

### **Pentamethylimidazolium bis(trifluoromethylsulfonyl)imide**

---

Alternative Name: [M5IM] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C10H15F6N3O4S2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### **Tetraethylammonium bis(pentafluoroethylsulfonyl)imide**

---

Alternative Name: TEA bis(pentafluoroethylsulfonyl)imide  
Empirical Formula: C12H20F10N2O4S2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### **1-Ethyl-3-methylimidazolium bis(pentafluoroethylsulfonyl)imide**

---

Alternative Name: [EMIM] bis(pentafluoroethylsulfonyl)imide  
Empirical Formula: C10H11F10N3O4S2  
CAS Registry Number: 216299-76-2  
6 sets Pure component properties  
1 set Viscosity  
1 set Density  
4 sets Melting Point  
8 sets Vapor-liquid equilibria

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

---

Alternative Name: [EDMIM] bis(pentafluoroethylsulfonyl)imide  
Empirical Formula: C11H13F10N3O4S2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### **1-n-Propyl-2,3-dimethylimidazolium bis(pentafluoroethylsulfonyl)imide**

---

Alternative Name: [PDMIM] bis(pentafluoroethylsulfonyl)imide  
Empirical Formula: C12H15F10N3O4S2  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### **Tetraethylammonium tris(trifluoromethylsulfonyl)methide**

---

Alternative Name: TEA tris(trifluoromethylsulfonyl)methide  
Empirical Formula: C12H20F9NO6S3  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### **Tetra-n-butylammonium tris(trifluoromethylsulfonyl)methide**

---

Alternative Name: TBA tris(trifluoromethylsulfonyl)methide  
Empirical Formula: C20H36F9NO6S3  
CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### **1-Ethyl-3-methylimidazolium tris(trifluoromethylsulfonyl)methide**

---

Alternative Name: [EMIM] tris(trifluoromethylsulfonyl)methide  
Empirical Formula: C10H11F9N2O6S3

CAS Registry Number:  
2 sets Pure component properties  
2 sets Melting Point

### **N,N-Dimethylpyrrolidinium bis(trifluoromethylsulfonyl)imide**

---

Empirical Formula: C<sub>8</sub>H<sub>14</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number:  
2 sets Pure component properties  
1 set Melting Point  
1 set Entropy of Fusion

### **N-Methyl-N-Ethylpyrrolidinium bis(trifluoromethylsulfonyl)imide**

---

Empirical Formula: C<sub>9</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number:  
4 sets Pure component properties  
3 sets Melting Point  
1 set Entropy of Fusion

### **N-Methyl-N-n-propylpyrrolidinium bis(trifluoromethylsulfonyl)imide**

---

Empirical Formula: C<sub>10</sub>H<sub>18</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number:  
6 sets Pure component properties  
1 set Viscosity  
1 set Density  
3 sets Melting Point  
1 set Entropy of Fusion

### **1-Ethyl-3-methylimidazolium tetrabromoaluminate(III)**

---

Alternative Name: [EMIM] [AlBr<sub>4</sub>]  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>AlBr<sub>4</sub>N<sub>2</sub>  
CAS Registry Number:  
No data found.

### **1-Butyl-3-methylimidazolium methylsulfate**

---

Alternative Name: [BMIM] methylsulfate  
Empirical Formula: C<sub>9</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>S  
CAS Registry Number: 401788-98-5  
14 sets Densities and volumes of mixtures  
1 set Gas solubilities  
8 sets Liquid-liquid equilibria  
3 sets Pure component properties  
3 sets Density  
9 sets Vapor-liquid equilibria

### **1-Butyl-3-methylimidazolium trifluoromethanesulfonate**

---

Alternative Name: [BMIM] Trifluoromethanesulfonate  
Empirical Formula: C<sub>9</sub>H<sub>15</sub>F<sub>3</sub>N<sub>2</sub>O<sub>3</sub>S  
CAS Registry Number: 174899-66-2  
3 sets Liquid-liquid equilibria  
5 sets Pure component properties  
2 sets Melting Point  
3 sets Molar Heat Capacity (cP)

### **1-Butyl-3-methylimidazolium tetrachloroferrate**

---

Alternative Name: [BMIM]- tetrachloroferrate(III)  
Empirical Formula: C<sub>8</sub>H<sub>15</sub>Cl<sub>4</sub>FeN<sub>2</sub>  
CAS Registry Number:  
2 sets Pure component properties

1 set Density  
1 set Surface Tension

### [EMIM] trifluoromethylsulfate

---

Alternative Name: 1-Ethyl-3-methyl imidazolium trifluoromethylsulfate  
Empirical Formula: C7H11F3N2O3S  
CAS Registry Number: 145022-44-2  
17 sets Gas solubilities  
1 set Liquid-liquid equilibria  
7 sets Pure component properties  
3 sets Density  
1 set Melting Point  
3 sets Molar Heat Capacity (cP)  
1 set Vapor-liquid equilibria

### [EMIM] dicyanamide

---

Alternative Name: 1-ethyl-3-methyl-imidazolium N(CN)2  
Empirical Formula: C8H11N5  
CAS Registry Number:  
11 sets Gas solubilities

### Trihexyl tetradecyl phosphonium chloride

---

Alternative Name: Tri-n-hexyl-n-tetradecylphosphonium chloride  
Empirical Formula: C32H68ClP  
CAS Registry Number:  
48 sets Activity coefficients at infinite dilution (binary systems)  
7 sets Gas solubilities  
8 sets Pure component properties  
8 sets Density

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

---

Alternative Name: [hydemim] tetrafluoroborate  
Empirical Formula: C6H11BF4N2O  
CAS Registry Number:  
4 sets Azeotropic/zeotropic information  
1 set Liquid-liquid equilibria  
4 sets Vapor-liquid equilibria

### 1-Ethyl-3-methylimidazolium tetrachlorogallate

---

Alternative Name: [C2MIM] Tetrachlorogallate  
Empirical Formula: C6H12Cl4GaN2  
CAS Registry Number:  
5 sets Densities and volumes of mixtures

### Triethylamine hydrochloride 2[AlCl3]

---

Empirical Formula: C6H16Al2Cl7N  
CAS Registry Number:  
3 sets Liquid-liquid equilibria

### 1-Hexyloxymethyl-3-methylimidazolium tetrafluoroborate

---

Alternative Name: [C6H13OCH2-MIM] [BF4]  
Empirical Formula: C11H21BF4N2O  
CAS Registry Number:  
11 sets Liquid-liquid equilibria

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

---

Alternative Name: [C6H13OCH2-MIM] [Tf2N]

Empirical Formula: C13H21F6N3O5S2  
CAS Registry Number:  
9 sets Liquid-liquid equilibria

### 1-Butyl-3-methylimidazolium 2-(2methoxyethoxy) ethyl sulfate

---

Alternative Name: [BMIM] [MDEGSO4]  
Empirical Formula: C13H26N2O6S  
CAS Registry Number:  
48 sets Activity coefficients at infinite dilution (binary systems)  
3 sets Pure component properties  
    1 set Viscosity  
    1 set Molar Heat Capacity (cP)  
    1 set Transition Temperature  
1 set Vapor-liquid equilibria

### 1-Hexyl-3-methylimidazolium trifluoromethylsulfonat

---

Alternative Name: [C6MIM] trifluoromethylsulfonat  
Empirical Formula: C11H19F3N2O3S  
CAS Registry Number:  
3 sets Pure component properties  
    3 sets Molar Heat Capacity (cP)

### 1-Octyl-3-methylimidazolium trifluoromethylsulfonate

---

Alternative Name: [OMIM] trifluoromethylsulfonate  
Empirical Formula: C13H23F3N2O3S  
CAS Registry Number:  
6 sets Pure component properties  
    1 set Density  
    1 set Melting Point  
    3 sets Molar Heat Capacity (cP)  
    1 set Transition Temperature

### N-Ethyl-4-(N',N'-dimethylammonium)pyridinium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: [EAPY] [BTI]  
Empirical Formula: C11H15F6N3O4S2  
CAS Registry Number:  
3 sets Pure component properties  
    3 sets Molar Heat Capacity (cP)

### N-Butyl-4-(N',N'-dimethylammonium)pyridinium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: [BAPY] [BTI]  
Empirical Formula: C13H19F6N3O4S2  
CAS Registry Number:  
3 sets Pure component properties  
    3 sets Molar Heat Capacity (cP)

### N-Hexyl-4-(N',N'-dimethylammonium)pyridinium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: [HAPY] [BTI]  
Empirical Formula: C15H23F6N3O4S2  
CAS Registry Number:  
6 sets Pure component properties  
    1 set Viscosity  
    4 sets Molar Heat Capacity (cP)  
    1 set Transition Temperature

### Trihexyl tetradecyl phosphonium dodecylbenzenesulfonate

---

Alternative Name: [P6,6,14] [C12H25PhSO3]  
Empirical Formula: C50H97O3PS

CAS Registry Number:  
1 set Gas solubilities  
4 sets Vapor-liquid equilibria

---

**Trihexyl tetradecyl phosphonium methanesulfonate**

---

Alternative Name: [P6,6,6,14] [MeSO3]  
Empirical Formula: C33H71O3PS  
CAS Registry Number:  
1 set Gas solubilities  
4 sets Vapor-liquid equilibria

---

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

---

Alternative Name: [BMIM] [BETI]  
Empirical Formula: C12H15F10N3O4S2  
CAS Registry Number:  
5 sets Gas solubilities

---

**1-(2-Ethylsulfonyl)ethyl-3-methylimidazonium trifluoromethylsulfonate**

---

Alternative Name: [desmim] [TfO]  
Empirical Formula: C9H15F3N2O5S2  
CAS Registry Number:  
No data found.

---

**1-Hexyl-2,3-dimethylimidazolium bis(trifluoromethylsulfonyl)imide**

---

Alternative Name: [C6MMIM] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C13H21F6N3O4S2  
CAS Registry Number:  
1 set Critical data of mixtures  
1 set Liquid-liquid equilibria  
4 sets Pure component properties  
    1 set Viscosity  
    1 set Melting Point  
    1 set Molar Heat Capacity (cP)  
    1 set Transition Temperature

---

**AMMOENG (TM) 100**

---

Empirical Formula:  
CAS Registry Number:  
No data found.

---

**AMMOENG (TM) 101**

---

Empirical Formula:  
CAS Registry Number:  
No data found.

---

**AMMOENG (TM) 102**

---

Empirical Formula:  
CAS Registry Number:  
No data found.

---

**AMMOENG (TM) 110**

---

Empirical Formula:  
CAS Registry Number:  
No data found.

---

**AMMOENG (TM) 111**

---

Empirical Formula:  
CAS Registry Number:  
No data found.

### AMMOENG (TM) 112

---

Empirical Formula:  
CAS Registry Number:  
No data found.

### AMMOENG (TM) 120

---

Empirical Formula:  
CAS Registry Number:  
No data found.

### Ethyl-(2-hydroxyethyl)-dimethylammonium bromide

---

Empirical Formula: C<sub>6</sub>H<sub>16</sub>BrNO  
CAS Registry Number:  
5 sets Pure component properties  
    1 set Melting Point  
    1 set Heat of Fusion  
    2 sets Transition Temperature  
    1 set Heat of Transition  
8 sets Solid-liquid equilibria for systems without salts

### 1-Butyl-3-methylimidazolium octyl sulfate

---

Alternative Name: [BMIM] [C<sub>8</sub>O<sub>8</sub>SO<sub>3</sub>]  
Empirical Formula: C<sub>16</sub>H<sub>32</sub>N<sub>2</sub>O<sub>4</sub>S  
CAS Registry Number:  
47 sets Activity coefficients at infinite dilution (binary systems)  
16 sets Azeotropic/zeotropic information  
21 sets Densities and volumes of mixtures  
4 sets Liquid-liquid equilibria  
1 set Pure component properties  
    1 set Density  
17 sets Vapor-liquid equilibria

### 1,1,3,3-Tetramethylguanidine lactate

---

Alternative Name: TMGL  
Empirical Formula: C<sub>8</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>  
CAS Registry Number:  
7 sets Gas solubilities  
12 sets Vapor-liquid equilibria

### Trihexyl tetradecyl phosphonium tris(pentafluoro) trifluorophosphate

---

Alternative Name: [P<sub>6,6,6,14</sub>] tris(pentafluoro) trifluorophosphate  
Empirical Formula: C<sub>38</sub>H<sub>68</sub>F<sub>18</sub>P<sub>2</sub>  
CAS Registry Number:  
51 sets Activity coefficients at infinite dilution (binary systems)

### 1-Butyl-3-methylimidazolium acetate

---

Alternative Name: [BMIM] [OAc]  
Empirical Formula: C<sub>10</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>  
CAS Registry Number: 284049-75-8  
2 sets Pure component properties  
    1 set Viscosity  
    1 set Density  
2 sets Vapor-liquid equilibria

---

**1-Butyl-3-methylimidazolium hydrogensulfate**

---

Alternative Name: [BMIM] [HSO4]  
Empirical Formula: C8H16N2O4S  
CAS Registry Number:  
1 set Vapor-liquid equilibria

---

**1-Butyl-3-methylimidazolium salicylate**

---

Alternative Name: [BMIM] [Sal]  
Empirical Formula: C15H20N2O3  
CAS Registry Number:  
1 set Vapor-liquid equilibria

---

**1-Butyl-3-methylimidazolium thiocyanate**

---

Alternative Name: [BMIM] [SCN]  
Empirical Formula: C9H15N3S  
CAS Registry Number: 344790-87-0  
1 set Pure component properties  
1 set Density  
2 sets Vapor-liquid equilibria

---

**1-Butyl-3-methylimidazolium p-toluenesulfonate**

---

Alternative Name: [BMIM] [Tos]  
Empirical Formula: C15H22N2O3S  
CAS Registry Number:  
1 set Vapor-liquid equilibria

---

**1-Butyl-3-methylimidazolium dicyanamide**

---

Alternative Name: [BMIM] [N(CN)2]  
Empirical Formula: C10H15N5  
CAS Registry Number:  
1 set Vapor-liquid equilibria

---

**1-Butyl-3-methylimidazolium bis(oxalato)borate**

---

Alternative Name: [BMIM] [BOB]  
Empirical Formula: C12H15BN2O8  
CAS Registry Number:  
1 set Vapor-liquid equilibria

---

**1-Ethyl-3-methylimidazolium p-toluenesulfonate**

---

Alternative Name: [EMIM] [Tos]  
Empirical Formula: C13H18N2O3S  
CAS Registry Number:  
1 set Vapor-liquid equilibria

---

**1-Ethyl-3-methylimidazolium octylsulfate**

---

Alternative Name: [EMIM] [C8H17SO4]  
Empirical Formula: C14H28N2O4S  
CAS Registry Number:  
4 sets Liquid-liquid equilibria  
1 set Vapor-liquid equilibria

---

**1-Octylquinolinium bis(trifluoromethylsulfonyl) amide**

---

Alternative Name: [C8Chin] [BTA]  
Empirical Formula: C19H24F6N2O4S2

CAS Registry Number:  
1 set Vapor-liquid equilibria

### 1-Octylquinolinium bis[1,2-benzenediolato(2-)-O,O'] borate

---

Alternative Name: [C8Chin] [BBB]  
Empirical Formula: C<sub>29</sub>H<sub>32</sub>BN<sub>2</sub>O<sub>4</sub>  
CAS Registry Number:  
1 set Vapor-liquid equilibria

### ECOENG (TN) 500

---

Alternative Name: [CABHEM] [MeSO<sub>4</sub>]  
Empirical Formula: C<sub>40</sub>H<sub>85</sub>NO<sub>16</sub>S  
CAS Registry Number:  
3 sets Pure component properties  
    1 set Viscosity  
    1 set Molar Heat Capacity (cP)  
    1 set Transition Temperature  
1 set Vapor-liquid equilibria

### 1,3-Dimethyl-1H-imidazolium iodide

---

Alternative Name: [MMIM] Iodide  
Empirical Formula: C<sub>5</sub>H<sub>9</sub>IN<sub>2</sub>  
CAS Registry Number: 4333-62-4  
1 set Pure component properties  
    1 set Melting Point

### 1-Methyl-3-(2-propenyl)-1H-imidazolium chloride

---

Alternative Name: [AMIM] Cl  
Empirical Formula: C<sub>7</sub>H<sub>11</sub>ClN<sub>2</sub>  
CAS Registry Number: 65039-10-3  
1 set Pure component properties  
    1 set Viscosity

### 1-Butyl-3-methyl-1H-imidazolium salt with 3,5-dinitro-1H-1,2,4-triazole(1:1)

---

Alternative Name: [BMIM] 3,5-dinitro-1H-1,2,4-triazolate  
Empirical Formula: C<sub>10</sub>H<sub>15</sub>N<sub>7</sub>O<sub>4</sub>  
CAS Registry Number: 848243-40-3  
1 set Pure component properties  
    1 set Melting Point

### Tetra-n-butylammonium 3,5-dinitro-1H-1,2,4-triazolate

---

Alternative Name: N,N,N-Tributyl-1-butanaminium salt with 3,5-dinitro-1H-1,2,4-triazole (1:1)  
Empirical Formula: C<sub>18</sub>H<sub>36</sub>N<sub>6</sub>O<sub>4</sub>  
CAS Registry Number: 848243-43-6  
1 set Pure component properties  
    1 set Melting Point

### Tetraethylammonium 3,5-dinitro-1H-1,2,4-triazolate

---

Alternative Name: N,N,N-Triethylethanaminium salt with 3,5-dinitro-1H-1,2,4-triazole (1:1)  
Empirical Formula: C<sub>10</sub>H<sub>20</sub>N<sub>6</sub>O<sub>4</sub>  
CAS Registry Number: 848243-42-5  
1 set Pure component properties  
    1 set Melting Point

### Tetramethylammonium 3,5-dinitro-1H-1,2,4-triazolate

---

Alternative Name: N,N,N-Trimethylmethanaminium salt with 3,5-dinitro-1H-1,2,4-triazole (1:1)  
Empirical Formula: C<sub>6</sub>H<sub>12</sub>N<sub>6</sub>O<sub>4</sub>  
CAS Registry Number: 848243-41-4  
1 set Pure component properties  
1 set Melting Point

### 1-Decyl-3-methylimidazolium bromide

---

Alternative Name: [C10MIM] Bromide  
Empirical Formula: C<sub>14</sub>H<sub>27</sub>BrN<sub>2</sub>  
CAS Registry Number:  
1 set Densities and volumes of mixtures

### 1-Butyl-3-methylimidazolium 1,1,2,2-tetrafluoroethanesulfonate

---

Alternative Name: [bmim] 1,1,2,2-Tetrafluoroethanesulfonate  
Empirical Formula: C<sub>10</sub>H<sub>16</sub>F<sub>4</sub>N<sub>2</sub>O<sub>3</sub>S  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
1 set Vapor-liquid equilibria

### 1-Etyl-3-methylimidazolium 1,1,2,2-tetrafluoroethanesulfonate

---

Alternative Name: [emim] 1,1,2,2-Tetrafluoroethanesulfonate  
Empirical Formula: C<sub>8</sub>H<sub>12</sub>F<sub>4</sub>N<sub>2</sub>O<sub>3</sub>S  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
1 set Vapor-liquid equilibria

### 1-Heptyl-3-methylimidazolium 1,1,2,2-tetrafluoroethanesulfonate

---

Alternative Name: [C7mim] 1,1,2,2-Tetrafluoroethanesulfonate  
Empirical Formula: C<sub>13</sub>H<sub>22</sub>F<sub>4</sub>N<sub>2</sub>O<sub>3</sub>S  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
1 set Vapor-liquid equilibria

### 1-Dodecyl-3-methylimidazolium 1,1,2,2-tetrafluoroethanesulfonate

---

Alternative Name: [C12mim] 1,1,2,2-Tetrafluoroethanesulfonate  
Empirical Formula: C<sub>18</sub>H<sub>32</sub>F<sub>4</sub>N<sub>2</sub>O<sub>3</sub>S  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
1 set Vapor-liquid equilibria

### 1,2-Dimethyl-3-propylimidazolium tris(trifluoromethylsulfonyl)methide

---

Alternative Name: [dmpim] tris(trifluoromethylsulfonyl)methide  
Empirical Formula: C<sub>12</sub>H<sub>15</sub>F<sub>9</sub>N<sub>2</sub>O<sub>6</sub>S<sub>3</sub>  
CAS Registry Number: 169051-77-8  
1 set Pure component properties  
1 set Density  
4 sets Vapor-liquid equilibria

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

---

Alternative Name: [pmpy] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C<sub>11</sub>H<sub>14</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number: 817575-06-7  
1 set Pure component properties

1 set Density  
4 sets Vapor-liquid equilibria

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

---

Alternative Name: [bmpy] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C<sub>12</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number: 344790-86-9  
4 sets Pure component properties  
1 set Viscosity  
1 set Density  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature  
1 set Vapor-liquid equilibria

### 1-Butyl-3-methylimidazolium 1,1,2,3,3,3-hexafluoropropanesulfonate

---

Alternative Name: [bmim] 1,1,2,3,3,3-Hexafluoropropanesulfonate  
Empirical Formula: C<sub>11</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>3</sub>S  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
5 sets Vapor-liquid equilibria

### 1-Butyl-3-methylimidazolium 2-(1,2,2,2-tetrafluoroethoxy)-1,1,2,2-tetrafluoroethanesulfonate

---

Alternative Name: [bmim] [FS]  
Empirical Formula: C<sub>12</sub>H<sub>16</sub>F<sub>8</sub>N<sub>2</sub>O<sub>4</sub>S  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
1 set Vapor-liquid equilibria

### 1-Butyl-3-methylimidazolium 1,1,2-trifluoro-2-(perfluoroethoxy) ethanesulfonate

---

Alternative Name: [bmim] [TPES]  
Empirical Formula: C<sub>12</sub>H<sub>16</sub>F<sub>8</sub>N<sub>2</sub>O<sub>4</sub>S  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
5 sets Vapor-liquid equilibria

### 1-Butyl-3-methylimidazolium 1,1,2-trifluoro-2-(trifluoromethoxy) ethanesulfonate

---

Alternative Name: [bmim] [TTES]  
Empirical Formula: C<sub>11</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
5 sets Vapor-liquid equilibria

### Trimethyl-butylammonium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: [Me<sub>3</sub>BuN] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C<sub>9</sub>H<sub>18</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number:  
257 sets Activity coefficients at infinite dilution (binary systems)  
12 sets Azeotropic/zeotropic information  
1 set Densities and volumes of mixtures  
1 set Liquid-liquid equilibria  
12 sets Vapor-liquid equilibria

### Trihexyl tetradecyl phosphonium acetate

---

Alternative Name: Tri-n-hexyl-n-tetradecylphosphonium acetate

Empirical Formula: C34H71O2P  
CAS Registry Number:  
8 sets Pure component properties  
8 sets Density

### Trihexyl tetradecyl phosphonium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: Tri-n-hexyl-n-tetradecyl phosphonium  
bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C34H68F6NO4PS2  
CAS Registry Number:  
48 sets Activity coefficients at infinite dilution (binary systems)  
7 sets Pure component properties  
7 sets Density

### 1-Ethyl-3-methylimidazolium methanesulfonate

---

Alternative Name: [EMIM] methanesulfonate  
Empirical Formula: C7H14N2O3S  
CAS Registry Number: 145022-45-3  
1 set Liquid-liquid equilibria  
1 set Pure component properties  
1 set Density

### Trihexyl tetradecyl phosphonium 1,1,2-trifluoro-2-(perfluoroethoxy) ethanesulfonate

---

Alternative Name: [P6,6,6,14] [TPES]  
Empirical Formula: C36H69F8O4PS  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
4 sets Vapor-liquid equilibria

### Tribuyl tetradecyl phosphonium 1,1,2,3,3,3-hexafluoropropanesulfonate

---

Alternative Name: [P4,4,4,14] [HFPS]  
Empirical Formula: C29H57F6O4PS  
CAS Registry Number:  
1 set Pure component properties  
1 set Density  
4 sets Vapor-liquid equilibria

### 1-Ethyl-3-methylimidazolium diethylphosphate

---

Alternative Name: [EMIM] diethylphosphate  
Empirical Formula: C10H21N2O4P  
CAS Registry Number:  
7 sets Vapor-liquid equilibria

### 1-Propenyl-3-methylimidazolium bromide

---

Empirical Formula: C7H11BrN2  
CAS Registry Number:  
28 sets Activity coefficients at infinite dilution (binary systems)

### 1-Propenyl-3-octylimidazolium bromide

---

Empirical Formula: C14H25BrN2  
CAS Registry Number:  
28 sets Activity coefficients at infinite dilution (binary systems)

### 1-Propenyl-3-decylimidazolium bromide

---

Empirical Formula: C16H29BrN2  
CAS Registry Number:

28 sets Activity coefficients at infinite dilution (binary systems)

---

### 1-Propenyl-3-dodecylimidazolium bromide

---

Empirical Formula: C18H33BrN2

CAS Registry Number:

28 sets Activity coefficients at infinite dilution (binary systems)

---

### 1-Propyl boronic acid-3-methylimidazolium bromide

---

Empirical Formula: C7H14BBrN2O2

CAS Registry Number:

19 sets Activity coefficients at infinite dilution (binary systems)

---

### 1-Propyl boronic acid-3-octylimidazolium bromide

---

Empirical Formula: C14H28BBrN2O2

CAS Registry Number:

23 sets Activity coefficients at infinite dilution (binary systems)

---

### 1-Propyl boronic acid-3-decylimidazolium bromide

---

Empirical Formula: C16H32BBrN2O2

CAS Registry Number:

23 sets Activity coefficients at infinite dilution (binary systems)

---

### 1-Propyl boronic acid-3-dodecylimidazolium bromide

---

Empirical Formula: C18H36BBrN2O2

CAS Registry Number:

23 sets Activity coefficients at infinite dilution (binary systems)

---

### 1-Octyl-3-methylimidazolium nonafluorobutyl sulfonate

---

Alternative Name: [OMIM] [Nfo]

Empirical Formula: C16H23F9N2O3S

CAS Registry Number:

1 set Liquid-liquid equilibria

3 sets Pure component properties

1 set Density

1 set Melting Point

1 set Transition Temperature

---

### 1-Octyl-3-methylimidazolium dicyanamide

---

Alternative Name: [OMIM] [N(CN)2]

Empirical Formula: C14H23N5

CAS Registry Number:

3 sets Pure component properties

1 set Density

1 set Melting Point

1 set Transition Temperature

---

### N-Butyl-4-methylpyridinium bromide

---

Empirical Formula: C10H16BrN

CAS Registry Number:

2 sets Pure component properties

1 set Melting Point

1 set Transition Temperature

---

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

---

Empirical Formula: C12H16F6N2O4S2

CAS Registry Number:

- 1 set Liquid-liquid equilibria
- 3 sets Pure component properties
  - 1 set Density
  - 1 set Melting Point
  - 1 set Transition Temperature

### **N-Butyl-4-methylpyridinium trifluoromethylsulfonate**

---

Empirical Formula: C<sub>11</sub>H<sub>16</sub>F<sub>3</sub>N<sub>3</sub>O<sub>3</sub>S

CAS Registry Number:

- 3 sets Pure component properties
  - 1 set Density
  - 1 set Melting Point
  - 1 set Transition Temperature

### **N-Butyl-4-methylpyridinium nonafluorobutylsulfonate**

---

Empirical Formula: C<sub>14</sub>H<sub>16</sub>F<sub>9</sub>N<sub>3</sub>O<sub>3</sub>S

CAS Registry Number:

- 2 sets Pure component properties
  - 1 set Melting Point
  - 1 set Transition Temperature
- 1 set Solid-liquid equilibria for systems without salts

### **1-Butyl-3-methylimidazolium nonafluorobutyl sulfonate**

---

Alternative Name: [BMIM] [NfO]

Empirical Formula: C<sub>12</sub>H<sub>15</sub>F<sub>9</sub>N<sub>2</sub>O<sub>3</sub>S

CAS Registry Number:

- 1 set Liquid-liquid equilibria

### **Hexyl tributyl ammonium bis(trifluoromethylsulfonyl)imide**

---

Alternative Name: [C<sub>6</sub>(C<sub>4</sub>)<sub>3</sub>N] bis(trifluoromethylsulfonyl)imide

Empirical Formula: C<sub>20</sub>H<sub>40</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

CAS Registry Number:

- 2 sets Critical data of mixtures

### **[nC<sub>14</sub>MIM] bis(trifluoromethylsulfonyl)imide**

---

Alternative Name: nC<sub>14</sub>MIM: 1-n-tetradecyl-3-methyl-imidazolium

Empirical Formula: C<sub>20</sub>H<sub>35</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>

CAS Registry Number:

- 2 sets Pure component properties
  - 1 set Density
  - 1 set Surface Tension

### **1-Butyl-1-methylpyrrolidinium trifluoromethanesulfonate**

---

Empirical Formula: C<sub>10</sub>H<sub>20</sub>F<sub>3</sub>N<sub>3</sub>O<sub>3</sub>S

CAS Registry Number: 367522-96-1

No data found.

### **1-(2-Hydroxyethyl)-2,3-dimethylimidazolium tetrafluoroborate**

---

Alternative Name: [C<sub>2</sub>OHdmim] tetrafluoroborate

Empirical Formula: C<sub>7</sub>H<sub>13</sub>BF<sub>4</sub>N<sub>2</sub>O

CAS Registry Number:

- 1 set Liquid-liquid equilibria

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

---

Alternative Name: N-Methyl-N-hexylpyrrolidinium bis(trifluoromethylsulfonyl)imide

Empirical Formula: C<sub>13</sub>H<sub>24</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>

CAS Registry Number:  
1 set Pure component properties  
1 set Viscosity

### Trihexyl tetradecyl phosphonium tetrafluoroborate

---

Alternative Name: Tri-n-hexyl-n-tetradecyl phosphonium tetrafluoroborate  
Empirical Formula: C<sub>32</sub>H<sub>68</sub>BF<sub>4</sub>P  
CAS Registry Number:  
48 sets Activity coefficients at infinite dilution (binary systems)

### 1-Butyl-3-methylimidazolium dibutylphosphate

---

Alternative Name: [BMIM] dibutylphosphate  
Empirical Formula: C<sub>16</sub>H<sub>33</sub>N<sub>2</sub>O<sub>4</sub>P  
CAS Registry Number:  
5 sets Vapor-liquid equilibria

### Indium trichloride - 1-Ethyl-3-methylimidazolium chloride (1:1)

---

Alternative Name: [EMIM] - chloride - InCl<sub>3</sub>  
Empirical Formula: C<sub>6</sub>H<sub>11</sub>Cl<sub>4</sub>InN<sub>2</sub>  
CAS Registry Number:  
1 set Pure component properties  
1 set Density

### 1-Methyl-1-octyl-pyrrolidinium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: N-Methyl-N-octyl-pyrrolidinium bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C<sub>15</sub>H<sub>28</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number:  
No data found.

### 1-Octyl-3-methylimidazolium diethyleneglycolmonomethylethersulfate

---

Alternative Name: [MOIM] [M-DEGSO<sub>4</sub>]  
Empirical Formula: C<sub>17</sub>H<sub>34</sub>N<sub>2</sub>O<sub>6</sub>S  
CAS Registry Number:  
80 sets Activity coefficients at infinite dilution (binary systems)  
4 sets Liquid-liquid equilibria

### 1-Pentyl-3-methyl-imidazolium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: [C5MIM] bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C<sub>11</sub>H<sub>17</sub>F<sub>6</sub>N<sub>3</sub>O<sub>4</sub>S<sub>2</sub>  
CAS Registry Number:  
22 sets Pure component properties  
15 sets Density  
7 sets Speed of Sound

### [EMIM] trifluoroacetate

---

Alternative Name: 1-Ethyl-3-methyl imidazolium trifluoroacetate  
Empirical Formula: C<sub>8</sub>H<sub>11</sub>F<sub>3</sub>N<sub>2</sub>O<sub>2</sub>  
CAS Registry Number:  
1 set Pure component properties  
1 set Density

### Ethyl-(2-hydroxyethyl)-dimethyl ammonium tetrafluoroborate

---

Empirical Formula: C<sub>6</sub>H<sub>16</sub>BF<sub>4</sub>NO  
CAS Registry Number:  
4 sets Liquid-liquid equilibria  
7 sets Pure component properties  
1 set Melting Point

- 1 set Heat of Fusion
- 3 sets Transition Temperature
- 2 sets Heat of Transition
- 6 sets Solid-liquid equilibria for systems without salts

### Ethyl-(2-hydroxyethyl)-dimethyl ammonium hexafluorophosphate

---

Empirical Formula: C<sub>6</sub>H<sub>16</sub>F<sub>6</sub>NOP  
CAS Registry Number:  
2 sets Pure component properties  
1 set Melting Point  
1 set Heat of Fusion

### Ethyl-(2-hydroxyethyl)-dimethyl ammonium dicyanamide

---

Empirical Formula: C<sub>8</sub>H<sub>16</sub>N<sub>4</sub>O  
CAS Registry Number:  
3 sets Pure component properties  
1 set Melting Point  
1 set Heat of Fusion  
1 set Transition Temperature

### Butyl-(2-hydroxyethyl)-dimethyl ammonium bromide

---

Empirical Formula: C<sub>8</sub>H<sub>20</sub>BrNO  
CAS Registry Number:  
3 sets Liquid-liquid equilibria  
3 sets Pure component properties  
1 set Melting Point  
1 set Heat of Fusion  
1 set Transition Temperature  
3 sets Solid-liquid equilibria for systems without salts

### 1,3-Dibutyloxymethyl imidazolium tetrafluoroborate

---

Empirical Formula: C<sub>13</sub>H<sub>25</sub>BF<sub>4</sub>N<sub>2</sub>O<sub>2</sub>  
CAS Registry Number:  
3 sets Liquid-liquid equilibria  
4 sets Pure component properties  
1 set Melting Point  
1 set Heat of Fusion  
1 set Transition Temperature  
1 set Heat of Transition  
3 sets Solid-liquid equilibria for systems without salts

### 1,3-Dioctyloxymethyl imidazolium bis(trifluoromethylsulfonyl)imide

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Empirical Formula: C<sub>23</sub>H<sub>41</sub>F<sub>6</sub>N<sub>3</sub>O<sub>6</sub>S<sub>2</sub>  
CAS Registry Number:  
2 sets Pure component properties  
1 set Melting Point  
1 set Heat of Fusion  
3 sets Solid-liquid equilibria for systems without salts

### 1,3-Didecyloxymethyl imidazolium bis(trifluoromethylsulfonyl)imide

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Empirical Formula: C<sub>27</sub>H<sub>49</sub>F<sub>6</sub>N<sub>3</sub>O<sub>6</sub>S<sub>2</sub>  
CAS Registry Number:  
4 sets Pure component properties  
2 sets Melting Point  
2 sets Heat of Fusion  
1 set Solid-liquid equilibria for systems without salts

### N-Decyloxymethyl-3-amido-pyridinium tetrafluoroborate

---

Empirical Formula: C17H29BF4N2O2  
CAS Registry Number:  
1 set Liquid-liquid equilibria  
4 sets Solid-liquid equilibria for systems without salts

### (2-Hydroxyethyl)-dimethyl-propylammonium bromide

---

Empirical Formula: C7H18BrNO  
CAS Registry Number:  
9 sets Pure component properties  
1 set Melting Point  
1 set Heat of Fusion  
4 sets Transition Temperature  
3 sets Heat of Transition

### Hexyl-(2-hydroxyethyl)-dimethyl ammonium bromide

---

Empirical Formula: C10H24BrNO  
CAS Registry Number:  
3 sets Pure component properties  
1 set Melting Point  
1 set Heat of Fusion  
1 set Transition Temperature

### 1-n-Nonyl-3-methylimidazolium hexafluorophosphate

---

Alternative Name: [C9-MIM] Hexafluorophosphate  
Empirical Formula: C13H25F6N2P  
CAS Registry Number:  
1 set Liquid-liquid equilibria  
3 sets Pure component properties  
1 set Density  
1 set Melting Point  
1 set Transition Temperature

### 1-Ethyl-3-methylpyridinium ethylsulfate

---

Alternative Name: N-Ethyl-3-methylpyridinium ethylsulfate  
Empirical Formula: C10H17NO4S  
CAS Registry Number:  
3 sets Pure component properties  
1 set Viscosity  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### 1-Ethyl-nicotinic acid ethyl ester ethylsulfate

---

Empirical Formula: C12H19NO6S  
CAS Registry Number:  
3 sets Pure component properties  
1 set Viscosity  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### 1-Butyl-pyridinium bromide

---

Alternative Name: N-Butyl-pyridinium bromide  
Empirical Formula: C9H14BrN  
CAS Registry Number: 874-80-6  
1 set Pure component properties  
1 set Melting Point

### 1-Butyl-3-methyl-pyridinium bromide

---

Alternative Name: N-Butyl-3-methyl-pyridinium bromide

Empirical Formula: C10H16BrN  
CAS Registry Number:  
1 set Pure component properties  
1 set Transition Temperature

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### 1-Butyl-3-methyl-pyridinium tetrafluoroborate

---

Empirical Formula: C10H16BF4N  
CAS Registry Number:  
3 sets Pure component properties  
1 set Viscosity  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

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### 1-Butyl-3,5-dimethylpyridinium bromide

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Alternative Name: N-Butyl-3,5-dimethylpyridinium bromide  
Empirical Formula: C11H18BrN  
CAS Registry Number:  
2 sets Pure component properties  
1 set Melting Point  
1 set Transition Temperature

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### 1-Butyl-4(dimethylamino)pyridinium bromide

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Alternative Name: N-Butyl-4(dimethylamino)pyridinium bromide  
Empirical Formula: C11H19BrN2  
CAS Registry Number:  
1 set Pure component properties  
1 set Melting Point

---

### 1-Butyl-nicotinic acid butyl ester bis(trifluoromethylsulfonyl)imide

---

Alternative Name: N-Butyl-nicotinic acid butyl ester bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C16H22F6N2O6S2  
CAS Registry Number:  
4 sets Pure component properties  
1 set Viscosity  
1 set Melting Point  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

---

### 1-Hexyl-3-methylpyridinium bromide

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Alternative Name: N-Hexyl-3-methylpyridinium bromide  
Empirical Formula: C12H20BrN  
CAS Registry Number:  
2 sets Pure component properties  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

---

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

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Alternative Name: N-Hexyl-3-methylpyridinium bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C14H20F6N2O4S2  
CAS Registry Number:  
3 sets Pure component properties  
1 set Viscosity  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

---

### 1-Hexyl-3,5-dimethylpyridinium bis(trifluoromethylsulfonyl)imide

---

Empirical Formula: C15H22F6N2O4S2  
CAS Registry Number:

4 sets Pure component properties  
1 set Viscosity  
1 set Melting Point  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### 1-Hexyl-2-ethyl-3,5-dimethylpyridinium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: N-Hexyl-2-ethyl-3,5-dimethylpyridinium  
bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C17H26F6N2O4S2  
CAS Registry Number:  
2 sets Pure component properties  
1 set Viscosity  
1 set Transition Temperature

### 1-Hexyl-2-propyl-3,5-diethylpyridinium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: N-Hexyl-2-propyl-3,5-diethylpyridinium  
bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C20H32F6N2O4S2  
CAS Registry Number:  
3 sets Pure component properties  
1 set Viscosity  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### 1-Hexyl-4-(dimethylamino) pyridinium bromide

---

Alternative Name: N-Hexyl-4-(dimethylamino) pyridinium bromide  
Empirical Formula: C13H23BrN2  
CAS Registry Number:  
1 set Pure component properties  
1 set Melting Point

### 1-Hexyl-3-methyl-4-(dimethylamino)pyridinium bromide

---

Alternative Name: N-Hexyl-3-methyl-4-(dimethylamino)pyridinium bromide  
Empirical Formula: C14H25BrN2  
CAS Registry Number:  
2 sets Pure component properties  
1 set Melting Point  
1 set Transition Temperature

### 1-Hexyl-3-methyl-4-(dimethylamino)pyridinium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: N-Hexyl-3-methyl-4-(dimethylamino)pyridinium  
bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C16H25F6N3O4S2  
CAS Registry Number:  
4 sets Pure component properties  
1 set Viscosity  
1 set Melting Point  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### 1-Hexyl-4-(4-methylpiperidino) pyridinium bromide

---

Empirical Formula: C17H29BrN2  
CAS Registry Number:  
1 set Pure component properties  
1 set Transition Temperature

### 1-Hexyl-4-(4-methylpiperidino) pyridinium bis(trifluoromethylsulfonyl)imide

---

Alternative Name: N-Hexyl-4-(4-methylpiperidino) pyridinium  
bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C19H29F6N3O4S2  
CAS Registry Number:  
2 sets Pure component properties  
1 set Melting Point  
1 set Transition Temperature

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

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Alternative Name: N-Octyl-3-methylpyridinium bis(trifluoromethylsulfonyl)imide  
Empirical Formula: C16H24F6N2O4S2  
CAS Registry Number:  
3 sets Pure component properties  
1 set Viscosity  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### 1-Hexyl-3-methylimidazolium bromide

---

Alternative Name: N-Hexyl-3-methylimidazolium bromide  
Empirical Formula: C10H19BrN2  
CAS Registry Number:  
2 sets Pure component properties  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### 1-(3,4,5,6-Perfluorohexyl)-3-methylimidazolium bis(trifluoromethylsulfonyl)imide

---

Empirical Formula: C12H10F15N3O4S2  
CAS Registry Number:  
2 sets Pure component properties  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### Tetrabutylammonium docusate

---

Empirical Formula: C35H71NO7S  
CAS Registry Number:  
3 sets Pure component properties  
1 set Viscosity  
1 set Molar Heat Capacity (cP)  
1 set Transition Temperature

### 1-Octyl-3-methylimidazolium bromide

---

Empirical Formula: C12H23BrN2  
CAS Registry Number: 61545-99-1  
1 set Pure component properties  
1 set Molar Heat Capacity (cP)

### 1-Ethylpyridinium ethylsulfate

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Empirical Formula: C9H15NO4S  
CAS Registry Number:  
1 set Pure component properties  
1 set Viscosity

### 1-Butyl-3-methylimidazolium trifluoroacetate

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Alternative Name: [bmim] trifluoroacetate  
Empirical Formula: C10H15F3N2O2  
CAS Registry Number: 174899-94-6  
1 set Pure component properties  
1 set Viscosity

