

**1-Ethyl-3-methylimidazolium acetate**

Version number: GHS 3.0

Revision: 03.07.2018

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

<b>Identification of the substance</b>	<b>1-Ethyl-3-methylimidazolium acetate</b>
<b>Registration number (REACH)</b>	01-2120772508-45-0000
<b>EC number</b>	604-344-8
<b>CAS number</b>	143314-17-4
<b>Alternative name(s)</b>	EMIM OAc
<b>Alternative number(s)</b>	00102.2000, 00102.3000, 00102.4000

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

<b>Relevant identified uses</b>	Product and process orientated research and development Industrial uses
<b>Uses advised against</b>	Do not use for products which come into contact with the food stuffs. Do not use for private purposes (household).

**1.3 Details of the supplier of the safety data sheet**

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**1.4**

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**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 (CLP)**

Section	Hazard class	Cat-egory	Hazard class and category	Hazard state-ment
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.4S	skin sensitisation	1B	Skin Sens. 1B	H317

For full text of abbreviations: see SECTION 16.

**2.2 Label elements**

**Labelling according to Regulation (EC) No 1272/2008 (CLP)**

- signal word            warning

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- pictograms  
GHS07



- hazard statements

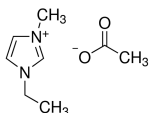
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.

- precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P501 Dispose of contents/container to industrial combustion plant.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

<b>Name of substance</b>	1-Ethyl-3-methylimidazolium acetate
<b>IUPAC name</b>	1-ethyl-3-methylimidazol-3-ium;acetate
<b>Identifiers</b>	
<b>REACH Reg. No</b>	01-2120772508-45-0000
<b>CAS No</b>	143314-17-4
<b>EC No</b>	604-344-8
<b>Purity</b>	≥95 %
<b>Molecular formula</b>	C <sub>8</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub>
<b>Molar mass</b>	170,2 g/mol
<b>Structural formula</b>	

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water. If skin irritation occurs, consult a doctor.

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**Following eye contact**

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In all cases of doubt, or when symptoms persist, seek medical advice.

**Following ingestion**

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

**4.2 Most important symptoms and effects, both acute and delayed**

See SECTION 2.

**4.3 Indication of any immediate medical attention and special treatment needed**

none

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Foam, BC-powder, Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media**

Water jet

**5.2 Special hazards arising from the substance or mixture**

**Hazardous combustion products**

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sulphur oxides (SO<sub>x</sub>)

**5.3 Advice for firefighters**

Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

For removal of spilled product always wear personal protective equipment.

**For non-emergency personnel**

Remove persons to safety.

**For emergency responders**

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

**6.2 Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

**6.3 Methods and material for containment and cleaning up**

**Advices on how to contain a spill**

Covering of drains

**Advices on how to clean up a spill**

Wipe up with absorbent material (e.g. cloth, fleece). Use water for subsequent cleaning.

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**Appropriate containment techniques**

Use of adsorbent materials.

**Other information relating to spills and releases**

Place in appropriate containers for disposal. Ventilate affected area.

**6.4 Reference to other sections**

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

**Recommendations**

Use only in well-ventilated areas. Contaminated surfaces must not be cleaned with compressed air due to the possible formation of aerosols.

**Advice on general occupational hygiene**

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

**7.2 Conditions for safe storage, including any incompatibilities**

Store upright. Keep only in the original container in a cool, well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**7.3 Specific end use(s)**

The product must be used only for the purposes specified by the manufacturer (see above).

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate engineering controls**

General ventilation. General industrial hygiene practice. Take precautions, which are usual when handling chemicals.

**Individual protection measures (personal protective equipment)**

The individual protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the handled substances.

**Eye/face protection**

Wear eye protection.

**Skin protection**

**- hand protection**

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use.

**- other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

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**Respiratory protection**

Respiratory protection not required.

**Environmental exposure controls**

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Appearance**

Physical state	liquid
Colour	colorless to yellow
Odour	faintly like acetic acid and imidazoles

**Other safety parameters**

pH (value)	not determined
Melting point/freezing point	<0 °C
Initial boiling point and boiling range	no boilingpoint according to OECD103
Flash point	164 °C at 1.013 hPa
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapour pressure	<0,000001 hPa at 25 °C
Density	1,101 g/cm <sup>3</sup> at 20 °C
Vapour density	not determined

**Solubility(ies)**

- water solubility	completely miscible with water
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**Partition coefficient**

- n-octanol/water (log KOW)	-2,5 (pH value: 6,4, 23 °C)
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Auto-ignition temperature	not determined
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**Viscosity**

- dynamic viscosity	200 – 210 mPa s at 20 °C
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<b>Explosive properties</b>	none
<b>Oxidising properties</b>	none

**9.2 Other information**

<b>Refractive index</b>	1,503 (20 °C)
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**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

**10.2 Chemical stability**

See below "Conditions to avoid".

**10.3 Possibility of hazardous reactions**

No known hazardous reactions.

**10.4 Conditions to avoid**

There are no specific conditions known which have to be avoided.

**10.5 Incompatible materials**

Oxidisers

**10.6 Hazardous decomposition products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Classification according to GHS (1272/2008/EC, CLP)**

**Acute toxicity**

Shall not be classified as acutely toxic.

<b>Oral</b>	2.000 mg/kg
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**Skin corrosion/irritation**

Causes skin irritation.

**Respiratory or skin sensitisation**

May cause an allergic skin reaction.

**Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

**Carcinogenicity**

Shall not be classified as carcinogenic.

**Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

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**Specific target organ toxicity - single exposure**

The classification criteria for this hazard class are not met.

**Specific target organ toxicity - repeated exposure**

The classification criteria for these hazard classes are not met.

**Aspiration hazard**

Not applicable.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

**Biodegradation**

Moderately/partially biodegradable.

**12.2 Persistence and degradability**

Data are not available.

**12.3 Bioaccumulative potential**

Data are not available.

**12.4 Mobility in soil**

Data are not available.

**12.5 Results of PBT and vPvB assessment**

This article does not meet the criteria for classification.

**12.6 Other adverse effects**

Data are not available.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Sewage disposal-relevant information**

Do not empty into drains.

**Waste treatment of containers/packagings**

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

**Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

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**SECTION 14: Transport information**

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 Transport hazard class(es)** none
- 14.4 Packing group** not relevant
- 14.5 Environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 Special precautions for user**  
There is no additional information.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**  
No data available.

**Information for each of the UN Model Regulations**

**Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

Not subject to ADR, RID and ADN.

**International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

**International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Relevant provisions of the European Union (EU)**

**Restrictions according to REACH, Annex XVII**

not listed

**National regulations (Germany)**

**Administrative Regulation on Substances Hazardous to Water (VwVwS)**

**Wassergefährdungsklasse, WGK** 1 slightly hazardous to water - classification acc. to annex 1 (AwSV)  
**(water hazard class)**

**15.2 Chemical Safety Assessment**

For this substance a chemical safety assessment is not required.

**SECTION 16: Other information**

**Abbreviations and acronyms**



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Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
IUPAC	International Union of Pure and Applied Chemistry
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

### List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

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### **Disclaimer**

The data contained in this safety data sheet are based on the current knowledge and experience of proionic GmbH and do not purport to be all inclusive. The safety data sheet shall be used only as a guide. The data do not describe the products properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose, except as mentioned, be deduced from the data contained in this safety data sheet. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.

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