

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

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

#### 1.1 Product identifier

<b>Trade name</b>	<b>IL-B2001</b>
<b>Registration number (REACH)</b>	01-2120086816-43-0000
<b>CAS number</b>	143314-16-3
<b>Alternative name(s)</b>	1-Ethyl-3-methyl-imidazolium tetrafluoroborate, stabilized stabilized EMIM-BF4
<b>Alternative number(s)</b>	C000000022

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

<b>Relevant identified uses</b>	Industrial uses Cooling liquid
<b>Sector of use</b>	Cooling medium for cooling of metallurgical systems for the production of non-ferrous metals, ferroalloys and iron/steel
<b>Uses advised against</b>	The product must be used only for the purposes specified by the manufacturer ( see above ). 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

**Proionic GmbH**  
**Parkring 18, Trakt H/1**  
**A-8074 Grambach**  
**Austria**

**Telephone: +43 (0) 316 4009-4200**  
**Telefax: +43 (0) 316 4009-4228**  
**e-mail: office@proionic.com**  
**Website: www.proionic.com**

#### Additional information

Manufacturer					
Country	Name	Postal code/city	Telephone	Telefax	Website
Austria	Proionic GmbH	A- 8074 Raaba-Grambach	+43 (0) 316 4009-4200	+43 (0) 316 4009-4228	www.proionic.com
Supplier of the product					
Country	Name	Postal code/city	Telephone	Telefax	Website
Austria	Mettop GmbH	A-8700 Leoben	+43 (0) 3842 817 87-22	+43 (0) 3842 817 87-8	www.mettop.com

**e-mail (competent person)** service@mettop.com

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

### 1.4 Emergency telephone numbers

**Proionic gmbH**

mo-fr 8am-4pm (CET): +43 (0) 316/ 4009- 4200

Mag. Roland Kalb +43 (0) 676/ 3145725

**Metttop GmbH**

+43 (0) 664 2282 100

this number is available 24 hours:

Dr. Iris Filzwieser +43 (0) 664 8860 4541

**Official advisory body**

Poisoning information center Austria:

+43 (0) 1 406 43 43

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The classification is based on tested 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

For full text of abbreviations: see SECTION 16.

### 2.2 Label elements

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

- signal word            warning

- pictograms

GHS07



- hazard statements

H315

Causes skin irritation.

- precautionary statements

P264

Wash thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352

IF ON SKIN: Wash with plenty of water.

P332+P313

If skin irritation occurs: Get medical advice/attention.

P362

Take off contaminated clothing.

P402

Store in a dry place.

P403+P233

Store in a well-ventilated place. Keep container tightly closed.

P502

Refer to manufacturer/supplier for information on recovery/recycling.

### 2.3 Other hazards

Non-biodegradable.

Do not allow contact with water.

Protect from moisture.

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

**SECTION 3: Composition/information on ingredients**

> 93 %w 1-Ethyl-3-methylimidazolium Tetrafluoroborate  
4,5 - 5,5 %w stabilizer

**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**

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

**Following eye contact**

Irrigate copiously with clean, fresh water, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing.

**Following ingestion**

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Drink 1% calcium gluconate solution in small sips (if not available, substitute milk or chalk slurry, or water).

**If swallowed immediately drink**

1% calcium gluconate substitute milk or chalk slurry

**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**

Calcium gluconate.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Alcohol resistant foam, Dry extinguishing powder, Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media**

Water jet, Water, Excess of water, Water spray

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

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

#### **Hazardous combustion products**

Nitrogen oxides (NO<sub>x</sub>), Bortrifluoride (BF<sub>3</sub>)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. 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.

#### **Special protective equipment for firefighters**

Protective clothing against liquid chemicals, Chemical protective clothing, Eye and face protection, Use suitable breathing apparatus

## SECTION 6: Accidental release measures

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

#### **For non-emergency personnel**

Remove persons to safety.

#### **For emergency responders**

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

#### **Suitable protective equipment**

See section 5 of the safety data sheet.

### 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**

After spillage neutralize with lime made into a slurry in sodium carbonate solution. See attached manual. Personal protective equipment shall be used when the risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization. With absorbent material and adsorbent material, eg: disposer set-ROTH (Art.Nr.: 1804.1) record.

#### **Appropriate containment techniques**

Use of adsorbent materials.

#### **Other information relating to spills and releases**

Place in appropriate containers for disposal. Ventilate affected area.

#### **Generelle Reinigung von Kleinstmengen (Gramm-Mengen)**

Kann mit Wasser oder Isopropanol gereinigt werden. Collect the washing solution and dispose as halogenated waste.

### 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.

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

See attached manual. Handling in enclosed plants. Personal protective equipment shall be used when the risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization. Avoid heating to above 200 ° C.

**Recommendations**

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

**- specific notes/details**

Prevent skin contact.

**- handling of incompatible substances or mixtures**

Do not mix with chemicals. Do NOT mix with water (sole exception: for analytical purposes).

**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****Managing of associated risks****- incompatible substances or mixtures**

Observe hints for combined storage.

**- do not mix with**

Acids and water

**7.3 Specific end use(s)**

See SECTION 1.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

These information are not available.

**8.2 Exposure controls****Appropriate engineering controls**

General ventilation.

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

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Eye/face protection**

Wear eye/face protection.

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

### 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. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**- type of material**

CR: chloroprene (chlorobutadiene) rubber, FKM: fluoro-elastomer

**- other protection measures**

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

### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

### 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

<b>Physical state</b>	liquid
<b>Colour</b>	light yellow to brown
<b>Odour</b>	characteristic

#### Other safety parameters

<b>pH (value)</b>	5,5-8,0 in 50w% Wasser bei 20 °C
<b>Melting point/freezing point</b>	-60 - 15 °C
<b>Initial boiling point and boiling range</b>	kein Siedepunkt gemäß OECD 103 und EU-Methode A.2
<b>Flash point</b>	kein Flammpunkt gemäß EU-Methode A.9
<b>Evaporation rate</b>	not determined
<b>Flammability (solid, gas)</b>	not relevant (fluid)
<b>Explosive limits</b>	not determined
<b>Vapour pressure</b>	0.0000043 Pa at 25 °C
<b>Density</b>	1.279 - 1.254 g/cm <sup>3</sup> at 20 °C
<b>Vapour density</b>	this information is not available

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

### Solubility(ies)

- water solubility	>1 g/l at 25 °C
- solubility in alcohol	>1 g/l at 25 °C
- solubility in dimethylsulfoxide (DMSO)	>1 g/l at 25 °C

### Partition coefficient

- n-octanol/water (log KOW)	-1.932 (pH value: 6.05, 25 °C)
Auto-ignition temperature	not determined

### Viscosity

- dynamic viscosity	18.42 mPa s at 40 °C 5.99 mPa s at 100 °C
Explosive properties	none
Oxidising properties	none

### 9.2 Other information

Refractive index	1,4100-1,4250 bei 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

Contact with 10%w to 50%w water at elevated temperatures (>80 °C) possibly liberates toxic fumes of hydrogen fluoride within 5 hours. Possibly liberates in contact with more than 50%w water at temperatures >60 °C toxic fumes of hydrogen fluoride within 5 hours. Contact with acids possibly liberates toxic gas.

### 10.4 Conditions to avoid

Temperatures >200 °C have an impact on the stability of the product.

### 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.

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### **Classification procedure**

The classification is based on tested mixture.

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

##### **Acute toxicity**

Shall not be classified as acutely toxic.  
May be harmful if swallowed.  
May be harmful in contact with skin.

##### **Skin corrosion/irritation**

Causes skin irritation.

##### **Serious eye damage/eye irritation**

Shall not be classified as seriously damaging to the eye or eye irritant.

##### **Respiratory or skin sensitisation**

Shall not be classified as a respiratory or skin sensitiser.

##### **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.

##### **Specific target organ toxicity - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

##### **Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

##### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

##### **Aquatic toxicity (acute)**

Endpoint	Value	Species	Exposure time
EC50	>100 mg/l	daphnia magna	48 h
ErC50	38 mg/l	algae	72 h



## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

### Aquatic toxicity (chronic)

Endpoint	Value	Species	Exposure time
ErC50	38 mg/l	algae	72 h

### Biodegradation

Not readily 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

Data are not available.

### 12.6 Other adverse effects

Not known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

The product can be recycled by the manufacturer. The product can be returned by the customer to the manufacturer. Use appropriate container to avoid environmental contamination. Do not empty into drains or surface water.

### Waste treatment-relevant information

Residues and used material have to be disposed to an authorized waste treatment facility.

### 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.

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

### 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)**  
**Class** -
- 14.4 **Packing group** not relevant
- 14.5 **Environmental hazards** none  
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**  
The cargo is not intended to be carried in bulk.

### SECTION 15: Regulatory information

- 15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Regulations should not be applied.

**National regulations (Austria)**

**Ordinance on combustible liquids (VbF)** not assigned  
no flashpoint according to EU-method A.9.

**National regulations (Germany)**

**Technical instructions on air quality control (Germany)**

Number	Group of substances	Class	Conc.	Mass flow	Mass concentration	Notation
	not assigned		100 wt%			

- 15.2 **Chemical Safety Assessment**  
For this substance NO chemical safety assesment has been carried out.

## IL-B2001

Version number: GHS 3.1

Revision: 21.09.2016

### SECTION 16: Other information

#### Abbreviations and acronyms

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)
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)
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
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). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.  
Health hazards, Environmental hazards: The classification is based on tested mixture.

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

Code	Text
H315	causes skin irritation

#### Disclaimer

The data contained in this safety data sheet are based on the current knowledge and experience of proionic GmbH. 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.  
Proionic GmbH shall not be held liable for any damage resulting from improper handling with the above product. Correct manipulation is written in the attached manual  
This safety data sheet has been compiled and is solely intended for this product – it may not be valid for this product used in combination with any material or any process.