

IL-B2001

Version number: GHS 4.0

Revision: 07.05.2018

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

1.1 Product identifier

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

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

Relevant identified uses	Industrial uses Coolant
Sector of use	Cooling medium for cooling of metallurgical systems for the production of non-ferrous metals, ferroalloys and iron/steel
Uses advised against	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
	Proionic GmbH (PROIONIC)				

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

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1.4 Emergency telephone numbers

Proionic gmbH	mo-fr 8am-4pm (CET): +43 (0) 316/ 4009- 4200 Roland Kalb +43 (0) 676/ 3145725
Mettop GmbH	Service Hotline, available 24 hours: +43 (0) 664 2282 100
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)

- signal word warning
- pictograms
GHS07 
- hazard statements
H315 Causes skin irritation.
- precautionary statements
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
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.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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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 (CO₂)

Unsuitable extinguishing media

Water jet, Water, Excess of water, Water spray

5.2 Special hazards arising from the substance or mixture**Hazardous combustion products**

Nitrogen oxides (NO_x), Boron trifluoride (BF₃)

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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.

General cleaning of small amounts

Use water or isopropanol. 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.

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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.

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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

Physical state	liquid
Colour	light yellow to brown
Odour	characteristic

Other safety parameters

pH (value)	5,5-8,0 in 50w% water at 20 °C
Melting point/freezing point	≤ -10 °C
Initial boiling point and boiling range	no boiling point according to OECD 103
Flash point	no flash point according to Method A.9.
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapour pressure	0.0000043 Pa at 25 °C
Density	1.279 – 1.254 g/cm ³ at 20 °C
Vapour density	this information is not available

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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)
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Auto-ignition temperature	not determined
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Viscosity

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

Refractive index	1,4100-1,4250 at 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.

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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.

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

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Aquatic toxicity (chronic)

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

Biodegradation

Not readily biodegradable.

12.2 Persistence and degradability

Process of degradability		
Process	Degradation rate	Time
carbon dioxide generation	1.8 %	28 d

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.

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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 | 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. |
|
 | |
| Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) | |
| Not subject to RID. | |
|
 | |
| European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) | |
| Not subject to 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**
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. |
|---|---|
- Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)**
- | | |
|--|-------------------------------|
| Wassergefährdungsklasse, WGK (water hazard class) | 1 slightly hazardous to water |
|--|-------------------------------|
- 15.2 Chemical Safety Assessment**
For this substance NO chemical safety assesment has been carried out.

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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)
ICAO	International Civil Aviation Organization
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.

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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 appropriate 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.