

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

Version number: GHS 1.0

Date of compilation: 2018-11-19

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

#### 1.1 Product identifier

<b>Identification of the substance</b>	<b>1-Butyl-3-methyl imidazolium bis(trifluoromethylsulfonyl)imide</b>
<b>Registration number (REACH)</b>	unavailable
<b>EC number</b>	605-742-4
<b>CAS number</b>	174899-83-3
<b>Alternative name(s)</b>	BMIM TFSI
<b>Alternative number(s)</b>	00216.1000

#### 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 Laboratory chemical
<b>Uses advised against</b>	Do not use for private purposes (household)

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

Proionic GmbH  
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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

<b>1.4 Emergency telephone number</b>	Poisoning information center Austria: +43 (0) 1 406 43 43
<b>Emergency information service</b>	Mo-fr 8am-4pm (CET): +43 (0) 316/ 4009- 4200

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Caution! Substance not yet fully tested. Self-classification.

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.10	acute toxicity (oral)	3	Acute Tox. 3	H301
3.9	specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

For full text of abbreviations: see SECTION 16.

Delayed or immediate effects can be expected after short or long-term exposure. Spillage and fire water can cause pollution of watercourses.

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### 2.2 Label elements

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

- signal word danger

- pictograms  
GHS06, GHS08



#### - hazard statements

**H301** Toxic if swallowed.  
**H373** May cause damage to organs through prolonged or repeated exposure.  
**H412** Harmful to aquatic life with long lasting effects.

#### - precautionary statements

**P260** Do not breathe dust/fume/gas/mist/vapours/spray.  
**P264** Wash thoroughly after handling.  
**P270** Do not eat, drink or smoke when using this product.  
**P301+P310** IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
**P314** Get medical advice/attention if you feel unwell.  
**P330** Rinse mouth.  
**P501** Dispose of contents/container to industrial combustion plant.

### 2.3 Other hazards

of no significance

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

<b>Name of substance</b>	1-Butyl-3-methyl imidazolium bis(trifluoromethylsulfonyl)imide
<b>Identifiers</b>	
<b>CAS No</b>	174899-83-3
<b>EC No</b>	605-742-4
<b>Purity</b>	≥98 %
<b>Molecular formula</b>	C <sub>10</sub> H <sub>15</sub> N <sub>3</sub> F <sub>6</sub> O <sub>4</sub> S <sub>2</sub>
<b>Molar mass</b>	419.4 g/mol

## 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. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

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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.

### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

### 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

Water spray, 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>), Hydrogen fluoride (HF)

### 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.

## 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

Suitable protective equipment. 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

Collect spillage. Wipe up with absorbent material (e.g. cloth, fleece). Sawdust. Kieselgur (diatomite). Sand. Universal binder.

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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 local and general ventilation. Use only in well-ventilated areas.

#### 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 locked up. Keep container tightly closed and in a well-ventilated place. Keep away from other materials.

#### - packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

## 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)

Use personal protective equipment as required.

#### Eye/face protection

Wear eye/face protection.

#### Skin protection

##### - protective clothing - protection against liquid chemicals

Wear suitable protective clothing. Chemical protective clothing.

##### - hand protection

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

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### - 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	colourless
Odour	characteristic

#### Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapour pressure	not determined
Density	1.442 g/cm <sup>3</sup> at 20 °C
Vapour density	this information is not available
Solubility(ies)	not determined

#### Partition coefficient

- n-octanol/water (log KOW)	this information is not available
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<b>Auto-ignition temperature</b>	not determined
<b>Viscosity</b>	not determined
<b>Explosive properties</b>	none
<b>Oxidising properties</b>	none
<b>Other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

#### 10.2 Chemical stability

Stable under normal conditions of use.

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

Do not allow contact with air.

#### 10.5 Incompatible materials

There is no additional information.

#### 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

Self-classification.

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

##### Acute toxicity

Toxic if swallowed.

##### Skin corrosion/irritation

No data available.

##### Serious eye damage/eye irritation

No data available.

##### Respiratory or skin sensitisation

Data are not available.

##### Germ cell mutagenicity

No data available.

##### Carcinogenicity

No data available.

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### Reproductive toxicity

Data are not available.

### Specific target organ toxicity - single exposure

Data are not available.

### Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Aspiration hazard

Data are not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Harmful to aquatic life with long lasting effects.

### Aquatic toxicity (acute)

No data available.

### 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

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Dispose of contents/container to industrial combustion plant.

### Waste treatment-relevant information

Incineration.

### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. 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

<b>14.1 UN number</b>	2810
<b>14.2 UN proper shipping name</b>	1-Butyl-3-methyl imidazolium bis(trifluoromethylsulfonyl)imide
<b>14.3 Transport hazard class(es)</b>	
<b>Class</b>	6.1 (toxic substances)
<b>14.4 Packing group</b>	II (substance presenting medium danger)
<b>14.5 Environmental hazards</b>	non-environmentally hazardous acc. to the dangerous goods regulations
<b>14.6 Special precautions for user</b>	
	Provisions for dangerous goods (ADR) should be complied within the premises.
<b>14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	
	The cargo is not intended to be carried in bulk.

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

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

<b>UN number</b>	2810
<b>Proper shipping name</b>	TOXIC LIQUID, ORGANIC, N.O.S.
<b>Class</b>	6.1
<b>Classification code</b>	T1
<b>Packing group</b>	II
<b>Danger label(s)</b>	6.1



<b>Special provisions (SP)</b>	274, 614, 802(ADN)
<b>Excepted quantities (EQ)</b>	E4
<b>Limited quantities (LQ)</b>	100 ml
<b>Transport category (TC)</b>	2
<b>Tunnel restriction code (TRC)</b>	D/E
<b>Hazard identification No</b>	60
<b>Emergency Action Code</b>	2X

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

<b>UN number</b>	2810
<b>Proper shipping name</b>	TOXIC LIQUID, ORGANIC, N.O.S.
<b>Class</b>	6.1
<b>Marine pollutant</b>	-
<b>Packing group</b>	II
<b>Danger label(s)</b>	6.1



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<b>Special provisions (SP)</b>	274
<b>Excepted quantities (EQ)</b>	E4
<b>Limited quantities (LQ)</b>	100 ml
<b>EmS</b>	F-A, S-A
<b>Stowage category</b>	B
<b>International Civil Aviation Organization (ICAO-IATA/DGR)</b>	
<b>UN number</b>	2810
<b>Proper shipping name</b>	Toxic liquid, organic, n.o.s.
<b>Class</b>	6.1
<b>Packing group</b>	II
<b>Danger label(s)</b>	6.1



<b>Special provisions (SP)</b>	A3, A4, A137
<b>Excepted quantities (EQ)</b>	E4
<b>Limited quantities (LQ)</b>	1 L

### SECTION 15: Regulatory information

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

Not relevant.

#### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

### 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)
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

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Abbr.	Descriptions of used abbreviations
EmS	Emergency Schedule
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")
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).

### Classification procedure

Self-classification

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

Code	Text
H301	Toxic if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

### 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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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