

**1 Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2

Article number: 2021

**CAS Number:**

223437-11-4

**Registration number**

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

No further relevant information available.

**Application of the substance / the preparation**

Laboratory chemical

**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Carl Roth GmbH + Co. KG

Schoemperlenstraße 3-5

76185 Karlsruhe

Germany

Telefon: +49/(0)721 5606-0

Telefax: +49/(0)721 5606-149

E-Mail: [sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)**Further information obtainable from:** Department Health, Safety and Environment**1.4 Emergency telephone number:**

Poison Centre Munich

Telefon +49/(0)89 19240

**2 Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

**Hazard pictograms**

GHS07

**Signal word** Warning

**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2**

(Contd. of page 1)

**Hazard statements**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.

**2.3 Other hazards**

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.  
**vPvB:** Not applicable.

### 3 Composition/information on ingredients

**3.1 Chemical characterization: Substances****CAS No. Description**

223437-11-4 1-Butyl-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)-imide

**Identification number(s) -**

**Formula:** C<sub>11</sub>H<sub>20</sub>N<sub>2</sub>F<sub>6</sub>S<sub>2</sub>O<sub>4</sub>

**Molar mass [g/mol]:** 422,40

### 4 First aid measures

**4.1 Description of first aid measures****General information:**

Remove any clothing soiled by the product.

**After inhalation:**

Supply fresh air; if there is any trouble seek medical help.

**After skin contact:**

Wash with water and soap.  
If skin irritation continues, consult a doctor.

**After eye contact:**

Rinse opened eye for 10 minutes under running water. Then consult a doctor.

**After swallowing:**

Rinse out mouth and drink a glass of water. Do not induce vomiting.  
Seek medical treatment.

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

We have no description of any toxic symptoms.

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

No further relevant information available.

(Contd. on page 3)

**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2**

(Contd. of page 2)

## 5 Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**For safety reasons unsuitable extinguishing agents:**

For this substance/mixture no limitations of extinguishing agents are given.

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

In the event of fire development of hazardous combustion gases or vapours possible.

In case of fire, the following can be released:

Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen fluoride (HF)  
Sulphure oxides (SO<sub>x</sub>)  
Carbon monoxide and carbon dioxide

### 5.3 Advice for firefighters

**Protective equipment:**

Wear self-contained respiratory protective device.  
Wear fully protective suit.

**Additional information** Vapours heavier than air.

## 6 Accidental release measures

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

Do not breathe vapour/spray.  
Ensure adequate ventilation  
Wear protective clothing.

### 6.2 Environmental precautions

Do not allow to enter sewers/ground water or penetrate the soil.

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

Absorb with liquid-binding material (e.g. Rotisorb® Art.-Nr. 1710.1).  
Dispose of the material collected according to regulations.  
Ensure adequate ventilation.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

**Information about fire - and explosion protection:**

No special measures required.

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

**Storage:****Requirements to be met by storerooms and receptacles:**

No special requirements.

(Contd. on page 4)

**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2**

(Contd. of page 3)

**Information about storage in one common storage facility:**

Store away from foodstuffs.

**Further information about storage conditions:**

Keep container tightly sealed.

**Recommended storage temperature:**

15-25 °C

**7.3 Specific end use(s)**

No further relevant information available.

## 8 Exposure controls/personal protection

**Additional information about design of technical facilities:**

No further data; see item 7.

**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:** Not required.**Additional information:**

The lists valid during the making were used as basis.

**8.2 Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Individual protection measures**

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

**Respiratory protection:**

Required when vapours/aerosols are generated.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

Nitrile, thickness &gt;0,3 mm.

(Contd. on page 5)

# Safety data sheet

according to Regulation (EC) No. 1907/2006



Printing date 26.03.2013

Version number 2

Revision: 26.03.2013

**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2**

(Contd. of page 4)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

### Penetration time of glove material

Value for the permeation: Level ≥ 6

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### Eye protection:



Tightly sealed goggles

### Body protection:

Protective work clothing

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

#### Appearance:

<b>Form:</b>	Fluid
<b>Colour:</b>	Yellowish
<b>Odour:</b>	Unpleasant
<b>Odour threshold:</b>	No information available.

**pH-value (- g/l) at 20 °C:** 5

#### Change in condition

<b>Melting point/Melting range:</b>	-18 °C
<b>Boiling point/Boiling range:</b>	No information available.

**Flash point:** Not applicable.

**Flammability (solid, gaseous):** No information available

**Ignition temperature:** No information available

**Decomposition temperature:** No information available

**Self-igniting:** No information available

**Danger of explosion:** Product does not present an explosion hazard.

#### Explosion limits:

<b>Lower:</b>	No information available.
<b>Upper:</b>	No information available.

**Oxidizing properties:** No information available.

**Vapour pressure:** No information available

**Density at 20 °C:** 1.401 g/cm<sup>3</sup>

**Vapour density** No information available

**Evaporation rate** No information available

**Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** No information available

(Contd. on page 6)



**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2**

(Contd. of page 5)

**Viscosity:****Dynamic:**

No information available.

**Kinematic:**

No information available.

**9.2 Other information**

No further relevant information available.

## 10 Stability and reactivity

**10.1 Reactivity**

No information available

**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**10.3 Possibility of hazardous reactions**

Contact with the below mentioned substances may cause violent reactions or an explosion.

Strong oxidizing agents

**10.4 Conditions to avoid**

Strong Heating.

**10.5 Incompatible materials:**

No information available.

**10.6 Hazardous decomposition products:**

In case of fire: see item 5.

**Additional information:** combustible

## 11 Toxicological information

**11.1 Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:**

Quantitative data on the toxicity of this product are not available.

**Primary irritant effect:****on the skin:**

Irritant to skin and mucous membranes.

**on the eye:**

Irritating effect.

**after inhalation:**

Irritations in the respiratory tract, coughing, dyspnoea.

**Sensitization:**

No sensitizing effects known.

**CMR effects:****Germ cell mutagenicity:**

No information available.

**Carcinogenicity:**

No information available.

**Reproductive toxicity:**

No information available.

(Contd. on page 7)



**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2**

(Contd. of page 6)

**Aspiration hazard:**

No information available.

**Specific target organ toxicity - single exposure** May cause respiratory irritation.**Specific target organ toxicity - repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**11.2 Further information:**

The product should be handled with the care usual when dealing with chemicals.

**Additional toxicological information:**

After swallowing irritations in the mouth, throat, oesophagus and gastrointestinal tract.

## 12 Ecological information

**12.1 Toxicity****Aquatic toxicity:**

Quantitative data on the ecological effect of this product are not available.

**12.2 Persistence and degradability**

No further relevant information available.

**12.3 Bioaccumulative potential**

No further relevant information available.

**12.4 Mobility in soil**

No further relevant information available.

**Ecotoxicological effects:****Remark:**

Do not allow to enter waters, waste water, or soil!

**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects**

No further relevant information available.

## 13 Disposal considerations

**13.1 Waste treatment methods****Recommendation**

This material and its container must be disposed of as hazardous waste.

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

**Uncleaned packaging:****Recommendation:**

Disposal according to official regulations.

(Contd. on page 8)

# Safety data sheet

according to Regulation (EC) No. 1907/2006



Printing date 26.03.2013

Version number 2

Revision: 26.03.2013

**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2**

(Contd. of page 7)

## 14 Transport information

<b>14.1 UN-Number</b>	
ADR, ADN, IMDG, IATA	Void
<b>14.2 UN proper shipping name</b>	
ADR, ADN, IMDG, IATA	Void
<b>14.3 Transport hazard class(es)</b>	
ADR, ADN, IMDG, IATA Class	Void
<b>14.4 Packing group</b>	
ADR, IMDG, IATA	Void
<b>14.5 Environmental hazards:</b>	
Marine pollutant:	No
<b>14.6 Special precautions for user</b>	Not applicable.
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>Transport/Additional information:</b>	
ADR Remarks:	Not subject to transport regulations.
<b>UN "Model Regulation":</b>	-

## 15 Regulatory information

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

#### National regulations:

#### Information about limitation of use:

In dealing with chemicals the national laws must be observed.  
Employment restrictions concerning juveniles must be observed.

#### Waterhazard class:

Water hazard class 3 (Assessment by list): extremely hazardous for water.

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing MSDS:** Department: Health, Safety and Environment

**Contact:** Herr Heine

#### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

(Contd. on page 9)

**Safety data sheet**  
**according to Regulation (EC) No. 1907/2006**



Printing date 26.03.2013

Version number 2

Revision: 26.03.2013

**Trade name: 1-Butyl-1-methyl-pyrrolidinium-bis-(trifluoromethylsulphonyl)-imide ≥99 %, BMPyrr NTf2**

(Contd. of page 8)

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

LD50\*: Lethal Dose, 50 percent (Not relevant for classification)

LD50\*: Lethal Concentration, 50 percent (Not relevant for classification)

**\* Data compared to the previous version altered.**

GB