

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Trifluoromethanesulfonic acid

Revision Date: 9/23/2022

Date Issued: 9/23/2022

Version: 2

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name	Trifluoromethanesulfonic acid
Product code	KI-0008
CAS	1493-13-6
REACH No.	A registration number is not available for this substance as the substance or its uses are exempted from registration, 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

Identified uses	Laboratory chemicals, Manufacture of substances
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1.3 Details of the supplier of the safety data sheet

Supplier	IoLiTec Ionic Liquids Technologies GmbH Im Zukunftspark 9 D – 74076 Heilbronn Germany
Telephone	+49 (0)7131-89839-0
Fax	+49 (0)7131-89839-109
Email	msds@iolitec.de

1.4 Emergency telephone number

Emergency telephone	+49 (0)151-41255671
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2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Oral (Category 4)

Acute toxicity, Dermal (Category 4)

Skin corrosion (Category 1A)

Chronic aquatic toxicity (Category 4)

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)



Pictograms:

Signal word: Danger

H-phrases

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H413	May cause long lasting harmful effects to aquatic life.

P-phrases

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

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2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Trifluoromethanesulfonic acid

CAS: 1493-13-6

Ingredient name	Contents	Classification
Trifluoromethanesulfonic acid	>98%	Skin Corr. 1A; Acute Tox oral., derm.. 4; Aqu. Tox. 4

4 FIRST AID MEASURES

4.1 Description of first aid measures

General

Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhalation

If breathed in, move person into fresh air. If not breathing give artificial respiration

Consult a physician.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

Skin

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

Eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Alcohol-resistant foam, dry chemical or carbon dioxide. Do not use Water

5.2. Special hazards arising from the substance or mixture

Carbon oxides, Sulphur oxides, Hydrogen fluoride

5.3. Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing and avoid inhalation of vapor, skin or eye contact. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Avoid washing into water courses. Avoid contaminating public drains or water supply.

6.3 Methods and materials for containment and cleaning up

Avoid contact with skin or inhalation of spillage, dust or vapor. Avoid dust formation. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

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7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Handle and store under inert gas.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Eye/face protection

Safety goggles. Chemical resistant gloves. Protective clothing.

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

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

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Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH(US) or CEN (EU).

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid
Color	Colourless to yellow
Odor/taste	No data available

9.2 Other safety information

Melting Point	- 39,99°C
Boiling point	162 °C at 1013 hPa
Flash point	n/a
Vapor pressure	11 hPa at 25 °C
Density	1,696 g/cm ³ at 25 °C

10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

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10.4 Conditions to avoid

Exposure to moisture

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Other decomposition products - No data available.

11 TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes

Acute toxicity

LD50 Oral – Rat - 1.605 mg/kg

LD50 Dermal – Rat - 400 2.000 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

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11.2 Information on other hazards

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes serious eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: Not available

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 2.000 mg/l - 96 h

12.2 Persistence and degradability

Biodegradability Result: - Not readily biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

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13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Contact specialist disposal companies. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 3265

IMDG: 3265

IATA: 3265

14.2 UN proper shipping name

ADR/RID: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (1-Hexylimidazole)

IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (1-Hexylimidazole)

IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (1-Hexylimidazole)

14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

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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.

15.2 Chemical safety assessment

no data available

Country specific information

Germany

WGK:

(Self-Classification)

16 OTHER INFORMATION

DISCLAIMER

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