

# **SAFETY DATA SHEET**

According to 1907/2006/EC, Article 31

Revision number: 1 Revision date: 10/02/2018

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

1.1 Product identifiers

Product name: Bromoethane Product code: B0588

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

Identified uses: Reagents.

1.3 Details of the supplier of the safety data sheet

Supplier:

TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht

Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals.com

**1.4 Emergency telephone number:** +32(0)70 245 245

#### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Flammable liquids

Acute toxicity (Oral)

Acute toxicity (Inhalation)

Category 4

Carcinogenicity

Category 2

Category 4

Category 2

#### 2.2 Label elements

Pictograms or hazard symbols







Signal word Danger

Hazard statements H225-Highly flammable liquid and vapour.

H302+H332-Harmful if swallowed or if inhaled.

H351-Suspected of causing cancer.

Precautionary statements P210-Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261-Avoid breathing mist, vapours or spray.

P280-Wear protective gloves, protective clothing, face protection.

P303+P361+P353-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water or shower.

P304+P340+P312-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a

POISON CENTER or doctor if you feel unwell.

P308+P313-IF exposed or concerned: Get medical advice or attention.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

# SECTION 3: Composition/information on ingredients

3.1 Substances

 Components:
 Bromoethane

 Percent:
 >99.0%(GC)

 CAS RN:
 74-96-4

 EC-No:
 200-825-8

 Synonyms:
 Ethyl Bromide

 Chemical Formula:
 C2HsBr

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### SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Call a POISON CENTER or doctor/physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Call a POISON CENTER or doctor/physician.

Ingestion: Call a POISON CENTER or doctor/physician. Rinse mouth.

**Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

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

No data available

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

No data available

# SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Dry chemical, foam, wa Unsuitable extinguishing media: Solid streams of water

Dry chemical, foam, water spray, carbon dioxide.

5.2 Special hazards arising from the

substance or mixture

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Carbon dioxide, Carbon monoxide, Hydrogen bromide

**5.3** Advice for firefighters Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according

to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if

safe to do so. When extinguishing fire, be sure to wear personal protective equipment

### SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be

controlled around the leakage area by roping off, etc

**6.2 Environmental precautions** Prevent product from entering drains

6.3 Methods and materials for containment and cleaning up

Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and

explosion-proof equipment.

**6.4 Reference to other sections** For disposal see section 13.

#### SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid all contact!

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in an explosion-poof refregerator. Store locked up. Store away

from incompatible materials such as oxidizing agents.

Heat-sensitive, Light-sensitive

**7.3 Specific end use(s)**No further relevant information available.

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### SECTION 8: Exposure controls/personal protection

8.1 Control parameters

ACGIH TLV(TWA): 5 ppm (skin)
OSHA PEL(TWA): 200 ppm

8.2 Exposure controls Install a closed system or local exhaust. Also install safety shower and eye bath.

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

#### SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state (20°C): Liquid Form: Clear

Colorless - Slightly pale yellow

Odour: Ether-like Odour threshold: 3.1 ppm

pH: No data availableMelting point/freezing point: No data available

**Boiling point/range:** 38°C **Flash point:** -23°C

Evaporation rate(Butyl Acetate=1): No data available Flammability(solid, gas): No data available

Flammability or explosive limits:

 Lower:
 6.8%

 Upper:
 11%

 Vapour pressure:
 51kPa/20°C

 Vapour density:
 3.76

 Relative density:
 1.46

Solubility(ies):

[Water] Very slightly soluble (0.91g/100mL, 20°C)

[Other solvents]

Miscible: Ether, Alcohols, Chloroform

Partition coefficient: 1.51

n-octanol/water:

Autoignition temperature: 511°C

Decomposition temperature:No data availableDynamic Viscosity:No data availableKinematic viscosity:No data available

**9.2 Other safety information** No data available

## SECTION 10: Stability and reactivity

10.1 Reactivity No data available

**10.2 Chemical stability** Stable under proper conditions.

**10.3 Possibility of hazardous reactions** No special reactivity has been reported.

**10.4 Conditions to avoid** Spark, Open flame, Static discharge

10.5 Incompatible materials Oxidizing agents, Strong bases, Aluminium, Zinc, Magnesium

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Hydrogen bromide

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### SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

ihl-rat LC50:26980 ppm/1H **Acute Toxicity:** 

ipr-rat LD50:1750 mg/kg orl-rat LD50:1350 mg/kg

No data available No data available

Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: No data available Germ cell mutagenicity: mmo-sat 75 ng/plate (+S9)

sce-ham-ovr 100 mg/L Carcinogenicity: ihl-mus TCLo:200 ppm/6H/2Y-I ihl-rat TCLo:100 ppm/6H/2Y-I

IARC = Group 3 (Not classifiable as carcinogenic to humans)

NTP = No data available Reproductive toxicity: No data available STOT-single exposure: No data available STOT-repeated exposure: No data available Aspiration hazard: No data available KH6475000 **RTECS Number:** 

# SECTION 12: Ecological information

#### 12.1 Toxicity

Fish: No data available No data available Crustacea: Algae: No data available

12.2 Persistence and degradability 13 - 45% (by BOD)

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil

Log Pow: 1.51

Soil adsorption (Koc): No data available Henry's Law (PaM 3/mol): No data available

# 12.5 Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

No data available 12.6 Other adverse effects

# SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. Observe all federal, state and local regulations when disposing of the substance.

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### SECTION 14: Transport information

**14.1 UN number** 1891

14.2 UN proper shipping name

ADR/RID Ethyl bromide
IMDG/IMO Ethyl bromide
ICAO/IATA Ethyl bromide

14.3 Transport hazard class(es)

ADR/RID 6.1: Toxic substance
IMDG/IMO 6.1: Toxic substance
ICAO/IATA 6.1: Toxic substance

14.4 Packaging group

ADR/RID II
IMDG/IMO II
ICAO/IATA II

14.5 Environmental hazards

Marine pollutant -

14.6 Special precautions for user No data available

#### SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Water Hazard Classes (WGK):

Class 1 - Low hazard to waters

Substance of Very High Concern (SVHC) according to the Not listed

REACH Regulations (EC) No.1907/2006

A chemical safety assessment has not been carried out.

SECTION 16: Other information

15.2 Chemical safety assessment

Prepared by: TCI EUROPE N.V. Issue date: 10/02/2018

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

**End of Safety Data Sheet** 

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