Chemical Safety Data Sheet MSDS / SDS

# 2-BROMO-3-METHYL-2-BUTENE

Revision Date:2023-11-29 Revision Number:1

Beijing

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

# **Product identifier**

| Product name  | : 2-BROMO-3-METHYL-2-BUTENE  |  |
|---|--|--|
| CBnumber  | : CB3701238  |  |
| CAS   | : 3017-70-7  |  |
| Synonyms  | : 2-bromo-3-methylbut-2-ene,2-bromo-3-methyl-2-butene                          |  |
| Relevant identified uses of the substance or mixture and uses advised against |  |  |
| Relevant identified uses  | : For R&D use only. Not for medicinal, household or other use.                 |  |
| Uses advised against  | : none   |  |
| Company Identification  |  |  |
| Company   | : Chemicalbook   |  |
| Address   | : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, E |  |
| Telephone   | : 400-158-6606   |  |

# SECTION 2: Hazards identification

### GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word

Danger

#### **Precautionary statements**

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

#### Hazard statements

H301 Toxic if swalloed

H226 Flammable liquid and vapour

# SECTION 3: Composition/information on ingredients

# Substance

 Product name
 : 2-BROMO-3-METHYL-2-BUTENE

 Synonyms
 : 2-bromo-3-methylbut-2-ene,2-bromo-3-methyl-2-butene

Chemical Book

| CAS | : 3017-70-7 |
|-----|-------------|
| MF  | : C5H9Br    |
| MW  | : 149.03    |

# SECTION 4: First aid measures

### Description of first aid measures

#### General advice

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

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 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

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

No data available

# **SECTION 5: Firefighting measures**

### **Extinguishing media**

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides Hydrogen bromide gas Combustible.

### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# **Further information**

Use water spray to cool unopened containers.

# SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet- brushing and place in container for disposal according to local regulations (see section 13).

### **Reference to other sections**

For disposal see section 13.

# SECTION 7: Handling and storage

### Precautions for safe handling

#### Advice on safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

#### **Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. For precautions see section 2.2.

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

#### Storage conditions

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. Light sensitive.

#### Specific end use(s)

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

# SECTION 8: Exposure controls/personal protection

### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

#### **Exposure controls**

#### Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### 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 Regulation (EU) 2016/425 and the standard EN 374 derived from it. **Body Protection** 

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full- face respirator with multi-purpose 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# SECTION 9: Physical and chemical properties

#### Information on basic physicochemical properties

| Appearance                              | liquid                  |
|---|-------------------------|
| Odour                                   | No data available       |
| Odour Threshold                         | No data available       |
| рН                                      | No data available       |
| Melting point/freezing point            | -106.7°C (estimate)     |
| Initial boiling point and boiling range | 40 °C at 100 hPa - lit. |
| Flash point                             | 25 °C                   |
| Evaporation rate                        | No data available       |
| Flammability (solid, gas)               | No data available       |
| Upper/lower flammability or explosive   | No data available       |
| limits                                  |                         |
| Vapour pressure                         | No data available       |
| Vapour density                          | No data available       |
| Relative density                        | No data available       |
| Water solubility                        | No data available       |
| Partition coefficient: n-octanol/water  | No data available       |
| Autoignition temperature                | No data available       |
| Decomposition temperature               | No data available       |

| Viscosity            | Viscosity, kinematic: No data available Viscosity, dynamic: No data available |  |
|----------------------|---|--|
| Explosive properties | No data available   |  |
| Oxidizing properties | No data available   |  |

### Other safety information

No data available

# SECTION 10: Stability and reactivity

### Reactivity

No data available

### **Chemical stability**

Stable under recommended storage conditions. Contains the following stabilizer(s):

copper (%)

### Possibility of hazardous reactions

No data available

# Conditions to avoid

Heat, flames and sparks.

#### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

In the event of fire: see section 5

# SECTION 11: Toxicological information

### Information on toxicological effects

Acute toxicity No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitization No data available Germ cell mutagenicity Carcinogenicity No data available

# **SECTION 12: Ecological information**

Toxicity

No data available

Persistence and degradability

**Bioaccumulative potential** 

Mobility in soil

#### Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### Other adverse effects

# SECTION 13: Disposal considerations

#### Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated packaging**

Dispose of as unused product.

# **SECTION 14: Transport information**

#### **UN number**

ADR/RID: 1992 IMDG: 1992 IATA: 1992

#### UN proper shipping name

ADR/RID: FLAMMABLE LIQUID, TOXIC, N.O.S. (2-bromo-3-methyl-2-butene) IMDG: FLAMMABLE LIQUID, TOXIC, N.O.S. (2-bromo-3-methyl-

2-butene)

IATA: Flammable liquid, toxic, n.o.s. (2-bromo-3-methyl-2-butene)

### Transport hazard class(es)

ADR/RID: 3 (6.1) IMDG: 3 (6.1) IATA: 3 (6.1)

### Packaging group

ADR/RID: III IMDG: III IATA: III

#### **Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### Special precautions for user

No data available

# SECTION 15: Regulatory information

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

**Regulations on the Safety Management of Hazardous Chemicals** 

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

Vietnam National Chemical Inventory:Not Listed. website: https://chemicaldata.gov.vn/

United States Toxic Substances Control Act (TSCA) Inventory:Not Listed. website: https://www.epa.gov/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/

Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr

European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: https://echa.europa.eu/

EC Inventory:Not Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/

# **SECTION 16: Other information**

#### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service

EC50: Effective Concentration 50%

IATA: International Air Transportation Association

IMDG: International Maritime Dangerous Goods

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit

TWA: Time Weighted Average

#### References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- [10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

Disclaimer:

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