# Chemical Safety Data Sheet MSDS / SDS

# 4-BROMOMETHYL-6,7-DIMETHOXYCOUMARIN

Revision Date:2025-02-01 Revision Number:1

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

## **Product identifier**

| Product name  | : 4-BROMOMETHYL-6,7-DIMETHOXYCOUMARIN  |  |  |  |  |
|---|--|--|--|--|--|
| CBnumber  | : CB8200312  |  |  |  |  |
| CAS   | : 88404-25-5   |  |  |  |  |
| Synonyms  | : 4-BROMOMETHYL-6,7-DIMETHOXYCOUMARIN  |  |  |  |  |
| 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, Beijing |  |  |  |  |
| Telephone   | : 400-158-6606   |  |  |  |  |

# **SECTION 2: Hazards identification**

### GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word

Warning

Precautionary statements

P390 Absorb spillage to prevent material damage.

P405 Store locked up.

P501 Dispose of contents/container to.....

P406 Store in corrosive resistant/... container with a resistant inner liner.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash skin thouroughly after handling.

P264 Wash hands thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P234 Keep only in original container.
Hazard statements
H335 May cause respiratory irritation
H319 Causes serious eye irritation
H315 Causes skin irritation
H314 Causes severe skin burns and eye damage
H302 Harmful if swallowed
H290 May be corrosive to metals

# SECTION 3: Composition/information on ingredients

### Substance

| Product name | : 4-BROMOMETHYL-6,7-DIMETHOXYCOUMARIN |
|--------------|---------------------------------------|
| Synonyms     | : 4-BROMOMETHYL-6,7-DIMETHOXYCOUMARIN |
| CAS          | : 88404-25-5                          |
| MF           | : C12H11BrO4                          |
| MW           | : 299.12                              |
|              |                                       |

# SECTION 4: First aid measures

#### Description of first aid measures

#### General advice

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

#### lf 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. Consult a physician.

#### In case of eye contact

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

#### If swallowed

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

### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

#### **NFPA 704**

| 3             |   | 0  |
|---------------|---|--|
| HEALTH        | 3 | Short exposure could cause serious temporary or moderate residual injury (e.g. <u>liquid hydrogen, sulfuric acid, calcium</u> <u>hypochlorite</u> , hexafluorosilicic acid)  |
| FIRE          | 0 | Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride) |
| REACT         | 0 | Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, <u>N2</u> )   |
| SPEC.<br>HAZ. |   |  |

# SECTION 6: Accidental release measures

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate

personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### **Reference to other sections**

For disposal see section 13.

# SECTION 7: Handling and storage

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

### 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**

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 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, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

| Appearance                              | dark yellow powder  |
|---|---|
| Odour                                   | No data available   |
| Odour Threshold                         | No data available   |
| рН                                      | No data available   |
| Melting point/freezing point            | Melting point/range: 212 - 216 °C - lit.                                  |
| Initial boiling point and boiling range | No data available   |
| Flash point                             | No data available   |
| 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                        | Soluble in acetonitrile, dichloromethane, N,N-dimethylformamide, methanol |
| Partition coefficient: n-octanol/water  | No data available   |
| Autoignition temperature                | No data available   |
| Decomposition temperature               | No data available   |
| Viscosity                               | No data available   |
| Explosive properties                    | No data available   |
| Oxidizing properties                    | No data available   |
| λmax                                    | 348 nm (MeOH)   |

# Other safety information

No data available

# SECTION 10: Stability and reactivity

## Reactivity

No data available

# **Chemical stability**

Stable under recommended storage conditions.

### Possibility of hazardous reactions

No data available

Conditions to avoid

#### Incompatible materials

Strong bases, Strong oxidizing agents

#### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen bromide gas

Other decomposition products - No data available 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 sensitisation

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

**Additional Information** 

RTECS: Not available

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

# SECTION 12: Ecological information

### Toxicity

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

### 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.

## Other adverse effects

No data available

# SECTION 13: Disposal considerations

# Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

#### **UN number**

ADR/RID: - IMDG: - IATA: -

### UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

#### Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

### **Packaging group**

ADR/RID: - IMDG: - IATA: -

#### **Environmental hazards**

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

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:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.