Chemical Safety Data Sheet MSDS / SDS

2-Bromoanisole

Revision Date:2024-12-21 Revision Number:1

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

Product identifier

Product name	: 2-Bromoanisole			
CBnumber	: CB6758213			
CAS	: 578-57-4			
EINECS Number	: 209-425-8			
Synonyms	: 1-bromo-2-methoxybenzene,2-Bromoanisole			
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

Hazard statements

H303 May be harmfulif swallowed

SECTION 3: Composition/information on ingredients

Substance

Product name	: 2-Bromoanisole
Synonyms	: 1-bromo-2-methoxybenzene,2-Bromoanisole
CAS	: 578-57-4
EC number	: 209-425-8
MF	: C7H7BrO
MW	: 187.03

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.

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. 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



Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. diethyl

HEALTH	2	ether, ammonium phosphate, iodine)
FIRE	1	Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. mineral oil, ammonia)
		Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, N2)
SPEC. HAZ.		

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. 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 inhalation of vapour or mist. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

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

Material: Fluorinated rubber Minimum layer thickness: 0,7 mm Break through time: 480 min

Material tested:Vitoject? (KCL 890 / Aldrich Z677698, Size M)

Splash contact

Material: Fluorinated rubber Minimum layer thickness: 0,7 mm Break through time: 480 min

Material tested:Vitoject? (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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.

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. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

Appearance	light yellow clear, liquid
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: 2 °C - lit.
Initial boiling point and boiling range	223 °C - lit.

Flash point	98 °C - closed cup
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	1,502 g/mL at 25 °C
Water solubility	Soluble in ethanol and diethyl ether.
Partition coefficient: n-octanol/water	log Pow: 2,86 at 25 °C - Bioaccumulation is not expected.
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	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.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

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

Acute toxicity

LD50 Oral - Rat - 2.460 mg/kg Remarks: (RTECS)

Skin corrosion/irritation

Serious eye damage/eye irritation 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

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: BZ8500000

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

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 28,4 mg/l - 48 h (OECD Test Guideline 202)

Remarks: (in analogy to similar products)

Toxicity to algae

static test ErC50 - Desmodesmus subspicatus (green algae) - 55,6 mg/l - 72 h

(OECD Test Guideline 201)

Remarks: (in analogy to similar products)

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

Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

SECTION 14: Transport information

UN number ADR/RID:IMDG:IATA: IATA: IATA:IATA:

UN number

ADR/RID: 3272 IMDG: 3272 IATA: 3272 ADR/RID: 1147 IMDG: 1147 IATA: 1147 ADR/RID: 1993 IMDG: 1993 IATA: 1993 ADR/RID: 8 (3) IMDG: 8 (3) IATA: 8 (3) ADR/RID: 3272 IMDG: 3272 IATA: 3272 ADR/RID: 3272 IMDG: 3272 IATA: 3272 ADR/RID: 6.1 (3) IMDG: 6.1 (3) IATA: 6.1 (3) ADR/RID: 2430 IMDG: 2430 IATA: 2430

ADR/RID: METAL POWDER, FLAMMABLE, N.O.S. IMDG: METAL POWDER, FLAMMABLE, N.O.S. IATA: Metal powder, flammable, n.o.s.

Transport hazard class(es)

ADR/RID: 4.1 IMDG: 4.1 IATA: 4.1

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (XAV939) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (XAV939) IATA: Toxic solid, organic, n.o.s. (XAV939)

ADR/RID: ALKYLPHENOLS, SOLID, N.O.S. IMDG: ALKYLPHENOLS, SOLID, N.O.S. IATA: Alkylphenols, solid, n.o.s. ADR/RID: II IMDG: II IATA: II ADR/RID: ESTERS, N.O.S. (butyl butyrate) IMDG: ESTERS, N.O.S. (butyl butyrate) IATA: Esters, n.o.s. (butyl butyrate) ADR/RID: ESTERS, N.O.S. (Methyl 2-methylglycidate) IMDG: ESTERS, N.O.S. (Methyl 2-methylglycidate) IATA: Esters, n.o.s. (Methyl 2methylglycidate) ADR/RID: II IMDG: II IATA: II

ADR/RID: FLAMMABLE LIQUID, N.O.S. (1-Bromopentane) IMDG: FLAMMABLE LIQUID, N.O.S. (1-Bromopentane) IATA: Flammable liquid, n.o.s. (1-Bromopentane) ADR/RID: DECAHYDRONAPHTHALENE IMDG: DECAHYDRONAPHTHALENE IATA: Decahydronaphthalene ADR/RID: ESTERS, N.O.S. (Diallyl carbonate) IMDG: ESTERS, N.O.S. (Diallyl carbonate) IATA: Esters, n.o.s. (Diallyl carbonate)

Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3 ADR/RID: 3 IMDG: 3 IATA: 3 ADR/RID: 3 IMDG: 3 IATA: 3 ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: 3 IMDG: 3 IATA: 3 ADR/RID: 3 IMDG: 3 IATA: 3 ADR/RID: no IMDG Marine pollutant: yes IATA: no ADR/RID: 8 IMDG: 8 IATA: 8 ADR/RID: 8 IMDG: 8 IATA: 8 ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1 ADR/RID: 11 IMDG: 11 IATA: 11

Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: III IMDG: III IATA: III ADR/RID: II IMDG: II IATA: II No data available ADR/RID: III IMDG: III IATA: III ADR/RID: III IMDG: III IATA: III No data available ADR/RID: III IMDG: III IATA: III ADR/RID: III IMDG: III IATA: III

Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no ADR/RID: yes IMDG Marine pollutant: yes IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no Special precautions for user No data available ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no No data available

Special precautions for user

No data available No data available No data available No data available 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 Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/ EC Inventory:Listed. European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/ Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/ United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/ Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/ Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

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.