

SAFETY DATA SHEET

Create Date: 2020-11-11

SECTION 1: COMPANY AND PRODUCT INFORMATION

1.1 Product identifiers

Product name : Bromoxynil
Cat. Number : ZXB-04-108
CAS number : 1689-84-5
Synonyms : 3,5-Dibromo-4-hydroxybenzotrile
1-Cyano-3,5-dibromo-4-hydroxybenzene
2,6-Dibromo-4-cyanophenol
3,5-Dibromo-4-hydroxybenzotrile
4-Cyano-2,6-dibromophenol
4-Hydroxy-3,5-dibromobenzotrile

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

Identified uses : Laboratory chemicals, manufacture of substances

1.3 Details of the supplier of the safety data sheet

Address : Hinter den Gärten 56
89173 Lonsee
Deutschland
Email : info@zellx.de
Phone : +49(0)731 55211521
Fax : +49(0)731 55211719

1.4 Emergency telephone number

Emergency phone : +49(0)731 55211521

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Not available

2.2 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 1), H330
Skin sensitisation (Category 1), H317
Reproductive toxicity (Category 2), H361
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

2.3 Label elements and precautionary statements

Pictogram : 

Signal word : Danger

- Hazard statement(s) : H301 Toxic if swallowed.
H317 May cause an allergic skin reaction.
H330 Fatal if inhaled.
H361 Suspected of damaging fertility or the unborn child.
H410 Very toxic to aquatic life with long lasting effects.
- Precautionary statement(s) : P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 Wear respiratory protection.
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

2.4 Hazards not otherwise classified (HNOC) or not covered by GHS

Not available

2.5 NFPA Rating

- Health hazard : 4
Fire hazard : 0
Reactivity hazard : 0

2.6 HMIS Rating

- Health hazard : 4
Chronic health hazard : Not available
Reactivity hazard : Not available
Flammability : 0
Physical hazard : 0

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance	CAS#	EC#	Concentration
Bromoxynil phenol M.F: C ₇ H ₃ Br ₂ NO M.W: 276.91 g/mol	1689-84-5	216-882-7	<= 100%

3.2 Hazardous components & classification

Acute Tox. 3, H301
Acute Tox. 1, H317
Skin Sens. 1, H330
Repr. 2, H361
AquaticAcute 1, Aquatic Chronic 1, H410

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

In case of inhalation

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.

In case of ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Not available

4.3 Indication of any immediate medical attention and special treatment needed

Not available

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable extinguishing media

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

5.2 Unsuitable extinguishing media

Not available

5.3 Special hazards arising from the substance

Carbon oxides, Nitrogen oxides (NOx), Hydrogen bromide gas

5.4 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8

6.2 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.

6.3 Methods and material for containment and cleaning up

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

For proper disposal see section 13

SECTION 7: HANDLING AND STORAGE

7.1 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

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials : Strong oxidizing agents, Strong bases

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

8.3 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.

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 : Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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.

General hygiene considerations : Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance : crystalline
- b) Physical states : solid
- c) Odor : Not available
- d) Odor threshold : Not available
- e) Melting point : 189 - 191 °C (372 - 376 °F) - lit.
- f) Boiling point range : Not available
- g) pH : Not available
- h) Density : Not available
- i) Flash point : Not available
- j) Evaporation rate : Not available
- k) Flammability : Not available
- l) Upper/lower flammability or explosive limits: : Not available
- m) Vapor pressure : Not available
- n) Vapor density : Not available
- o) Relative density : Not available
- p) Water solubility : slightly soluble
- q) Partition coefficient:n-octanol/water : log Pow: 2.8
- r) Autoignition temperature : Not available
- s) Decomposition temperature : Not available
- t) Kinematic viscosity : Not available
- u) Explosive properties : Not available
- v) Oxidizing properties : Not available
- w) Solubility in other solvents : Not available
- x) Surface tension : Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Stability note(s)

Not available

10.4 Polymerization

Not available

10.5 Possibility of hazardous reactions

Not available

10.6 Incompatible materials

Strong oxidizing agents, Strong bases

10.7 Hazardous decomposition products

Not available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute toxicity

LD50 Oral : Not available

LD50 Dermal : Not available

LC50 Inhalation : Not available

11.2 Skin corrosion/irritation

Not available

11.3 Serious eye damage/eye irritation

Not available

11.4 Respiratory or skin sensitization

Not available

11.5 Germ cell mutagenicity

Not available

11.6 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.

ACGIH : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

OSHA : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

11.7 Reproductive toxicity

May cause congenital malformation in the foetus. Suspected human reproductive toxicant.

11.8 Specific target organ toxicity – single exposure

Not available

11.9 Specific target organ toxicity – repeated exposure

Not available

11.10 Aspiration hazard

Not available

11.11 Additional Information

Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not available

12.2 Aquatic toxicity

Not available

12.3 Persistence and degradability

Not available

12.4 Bioaccumulative potential

Not available

12.5 Mobility in soil

Not available

12.6 Results of PBT and vPvB assessment

Not available

12.7 Other adverse effect

Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product

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

13.2 Packaging

Dispose of as unused product

13.3 Recommendation

Not available

SECTION 14: TRANSPORTATION INFORMATION

14.1 DOT (US)

Proper shipping name: Toxic solids, organic, n.o.s. (Bromoxynil phenol)

Marine pollutant:yes

Poison Inhalation Hazard: No

14.2 IMDG

Proper shipping name: Toxic solids, organic, n.o.s. (Bromoxynil phenol)

Marine pollutant:yes

14.3 IATA

Proper shipping name: Toxic solids, organic, n.o.s. (Bromoxynil phenol)

SECTION 15: REGULATORY INFORMATION

15.1 SARA

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III,Section 313

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

15.2 Clean water act (CWA)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

15.3 Right to know components

Massachusetts : No components are subject to the Massachusetts Right to Know Act.

Pennsylvania : Bromoxynil phenol CAS-No. 1689-84-5 Revision Date: 2007-07-01.

New Jersey : Bromoxynil phenol CAS-No. 1689-84-5 Revision Date: 2007-07-01.

California proposition : WARNING: This product contains a chemical known to the State of California to
65 components cause birth defects or other reproductive harm.

SECTION 16: OTHER INFORMATION

16.1 Disclaimer

This product is offered by zellx-biochem.com for research, laboratory or further manufacturing use. Not for human use or consumption. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant-ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall zellx-biochem.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if zellx-biochem.com has been advised of the possibility of such damages.

16.2 Copyright

Copyright 2020 www.zellx-biochem.com. License granted to make paper copies for internal use only.

16.2 Preparation Information

Create Date: 2020-11-11