# 1. PRODUCT

# **1.1 Product identifiers**

Name: 2-Bromophenol

CAS-No.: 95-56-7

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

Identified uses : Laboratory chemicals, Manufacture of substances

#### 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

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

Flammable liquids (Category 3), H226

Acute toxicity, Oral (Category 4), H302

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)	P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. P233 Keep container tightly closed. P240 Craund/band container and receiving equipment.
	P240 Ground/bond container and receiving equipment.
C.	P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
	P242 Use only non-sparking tools.
	P243 Take precautionary measures against static discharge.
	P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ 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.
	P273 Avoid release to the environment.
	P280 Wear protective gloves/ eye protection/ face protection.
	P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you
	Ifeel unwell. Rinse mouth.
	P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated
	clothing. Rinse skin with water/ shower.
	P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position
	comfortable for breathing. Call a POISON CENTER or doctor/ physician if
	you feel unwell.
	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P332 + P313 If skin irritation occurs: Get medical advice/ attention.
	P337 + P313 If eye irritation persists: Get medical advice/ attention.
	P362 Take off contaminated clothing and wash before reuse.
	P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for
<u>^</u>	extinction.
	P391 Collect spillage.
	P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
	P403 + P235 Store in a well-ventilated place. Keep cool.
	P405 Store locked up.
	P501 Dispose of contents/ container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

Formula:	C <sub>6</sub> H₅BrO
Molecular weight:	173.01 g/mol
CAS-No.:	95-56-7
EC-No.:	202-432-7

# Hazardous components

Component	Classification	Concentration
2-Bromophenol	A	
	Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H226, H302, H315, H319, H335, H410	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

General advice	
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.	
f inhaled 🔊	
f breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.	
n case of skin contact	
Nash off with soap and plenty of water. Consult a physician.	
n case of eye contact	
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.	
f swallowed	
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a ohysician.	

#### 4.2 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

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

No data available

### **5. FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

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

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

Carbon oxides, Hydrogen bromide gas

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

#### 6. ACCIDENTAL RELEASE MEASURES

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

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

sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive

concentrations. Vapours can accumulate in low areas.

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 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).

#### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

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

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

For precautions see section 2.2.

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

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.

Storage class (TRGS 510): Flammable liquids

# 7.3 Specific end use(s)

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

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

# Components with workplace control parameters

Contains no substances with occupational exposure limit values.

## 8.2 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

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). 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. 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
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. 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)
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.
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.
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).
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
W pu If t co Pr

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Appearance	Form: liquid
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: 3 - 7 °C (37 - 45 °F) - lit.
Initial boiling point and boiling range	195 °C (383 °F) - lit.
Flash point	42 °C (108 °F) - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available

Relative density	1.492 g/cm3 at 25 °C (77 °F)
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

# 9.2 Other safety information

No data available

# **10. STABILITY AND REACTIVITY**

#### **10.1 Reactivity**

No data available

# 10.2 Chemical stability

Stable under recommended storage conditions.

# 10.3 Possibility of hazardous reactions

No data available

# 10.4 Conditions to avoid

Heat, flames and sparks.

# 10.5 Incompatible materials

Acid chlorides, Acid anhydrides, Oxidizing agents

# **10.6 Hazardous decomposition products**

Other decomposition products - No data available

In the event of fire: see section 5

# **11. TOXICOLOGICAL INFORMATION**

# 11.1 Information on toxicological effects

Acute toxicity	
LD50 Oral - Mouse - 652 mg/kg Dermal: No data available No data available	aneth St
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	
probable, possible or confirmed human of ACGIH: No component of this product pr carcinogen or potential carcinogen by AC NTP: No component of this product press known or anticipated carcinogen by NTP	esent at levels greater than or equal to 0.1% is identified as a GIH. ent at levels greater than or equal to 0.1% is identified as a

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.

Reproductive toxicity	
lo data available lo data available	
Specific target organ toxicity -single exposure	
nhalation - May cause respiratory irritation.	
Specific target organ toxicity -repeated exposure	
lo data available	
Aspiration hazard	
lo data available	
Additional Information	
RTECS: SJ7875000 Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe dest ssue. Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence	ruction of

# **12. ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

Toxicity to fish	No data available
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0.9 mg/l - 48 h
Toxicity to algae	No data available
Toxicity to bacteria	No data available

# 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

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

# 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

No data available

# **13. DISPOSAL CONSIDERATIONS**

#### 13.1 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. Contact a licensed professional waste disposal service to dispose of this material.

# Contaminated packaging

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

DOT (US)

Proper shipping name: Flammable liquids, n.o.s. (2-Bromophenol)

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

## IMDG

UN number: 1993 Class: 3 Packing group: III EMS-No: F-E, S-E

Proper shipping name: FLAMMABLE LIQUID, N.O.S. (2-Bromophenol)

# ΙΑΤΑ

UN number: 1993 Class: 3 Packing group: III

Proper shipping name: Flammable liquid, n.o.s. (2-Bromophenol)

# **15. REGULATORY INFORMATION**

#### 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 (De

Minimis) reporting levels established by SARA Title III, Section 313.

### Massachusetts Right To Know Components

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

#### Pennsylvania Right To Know Components

Component	CAS-No.	Revision Date
2-Bromophenol	95-56-7	

#### New Jersey Right To Know Components

Component	CAS-No.	Revision Date
2-Bromophenol	95-56-7	

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

reproductive harm.

#### **16. OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity

Aquatic Chronic Chronic aquatic toxicity

Eye Irrit. Eye irritation

Flam. Liq. Flammable liquids

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

**HMIS** Rating

# Health hazard: 2

Chronic Health Hazard: \*

Flammability: 2

Physical Hazard 0

# **NFPA** Rating

Health hazard: 2

Fire Hazard: 2

Reactivity Hazard: 0