# 1. PRODUCT

## **1.1 Product identifiers**

Name: 1-Bromo-2-chlorobenzene

CAS-No.: 694-80-4

## 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 4), H227

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

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

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)	H227 Combustible liquid. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary statement(s)	<ul> <li>P210 Keep away from heat/sparks/open flames/hot surfaces No smoking.</li> <li>P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.</li> <li>P264 Wash skin thoroughly after handling.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear protective gloves/ eye protection/ face protection.</li> <li>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.</li> <li>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.</li> <li>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P332 + P313 If skin irritation occurs: Get medical advice/ attention.</li> <li>P337 + P313 If eye irritation persists: Get medical advice/ attention.</li> <li>P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.</li> <li>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</li> <li>P405 Store locked up.</li> <li>P501 Dispose of contents/ container to an approved waste disposal plant.</li> </ul>

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

No data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

## Hazardous components

Component	Classification	Concentration
2-Bromochlorobenzene		
	Flam. Liq. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H227, H315, H319, H335	<= 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.

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

Do NOT induce vomiting. 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

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 chloride gas, 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.

#### 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). Keep in suitable, closed containers for disposal.

#### 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.

Storage class (TRGS 510): Combustible 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

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

## 9.1 Information on basic physical and chemical properties

Appearance	Form: clear, liquid Colour: light yellow
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	204 °C (399 °F) - lit.
Flash point	91 °C (196 °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	1.638 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**

Strong 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

in corrosion/irritation	
data available	
rious eye damage/eye irritation	
data available	
spiratory or skin sensitisation	
data available	
rm cell mutagenicity	
data available	
rcinogenicity	
<ul> <li>RC: No component of this product present at levels greater than or equal to 0.1% is identified as bable, possible or confirmed human carcinogen by IARC.</li> <li>GIH: No component of this product present at levels greater than or equal to 0.1% is identified as a cinogen or potential carcinogen by ACGIH.</li> <li>P: No component of this product present at levels greater than or equal to 0.1% is identified as a one cinogen or potential carcinogen by ACGIH.</li> <li>P: No component of this product present at levels greater than or equal to 0.1% is identified as a pown or anticipated carcinogen by NTP.</li> <li>HA: No component of this product present at levels greater than or equal to 0.1% is identified as a component of this product present at levels greater than or equal to 0.1% is identified as a pown or anticipated carcinogen by NTP.</li> </ul>	
productive toxicity	
data available data available	
ecific target organ toxicity -single exposure	
alation - May cause respiratory irritation.	
ecific target organ toxicity -repeated exposure	
data available	
piration hazard	
data available	
ditional Information	
ECS: Not available the chemical, physical, and toxicological properties have not been thoroughly estigated.	

## **12. ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

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

No data available

## **13. DISPOSAL CONSIDERATIONS**

## 13.1 Waste treatment methods

#### Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

## DOT (US)

NA-Number: 1993 Class: NONE Packing group: III

Proper shipping name: Combustible liquid, n.o.s. (2-Bromochlorobenzene)

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

## IMDG

Not dangerous goods

## ΙΑΤΑ

Not dangerous goods

# **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.

## SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

## 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-Bromochlorobenzene	694-80-4	

#### New Jersey Right To Know Components

Component	CAS-No.	Revision Date
2-Bromochlorobenzene	694-80-4	

#### 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.

Eye Irrit. Eye irritation

Flam. Liq. Flammable liquids

H227 Combustible liquid.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Skin Irrit. Skin irritation

# HMIS Rating Health hazard: 2 Chronic Health Hazard: Flammability: 2 Physical Hazard 0 NFPA Rating Health hazard: 2

Fire Hazard: 2

Reactivity Hazard: 0



Chem