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SIGMA-ALDRICH

### Material Safety Data Sheet

Date Printed: 03/02/2004  
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Version 1.10

#### Section 1 - Product and Company Information

<b>Product Name</b>	3-BROMOCYCLOHEXENE, TECH., 90%		
<b>Product Number</b>	333549		
<b>Brand</b>	Aldrich Chemical		
<b>Company</b>	Sigma-Aldrich		
<b>Street Address</b>	3050 Spruce Street		
<b>City, State, Zip, Country</b>	SAINT LOUIS, MO 63103 US		
<b>Technical Phone:</b>	314 771 5765	<b>Emergency Phone:</b>	414 273 3850 Ext. 5996
<b>Fax:</b>	800 325 5052		

#### Section 2 - Composition/Information on Ingredient

<b>Substance Name</b>	<b>CAS #</b>	<b>SARA 313</b>
3-BROMOCYCLOHEXENE	1521-51-3	No

**Formula** C6H9Br  
**Synonyms**

#### Section 3 - Hazards Identification

##### Emergency Overview

Combustible (USA) Flammable (EU), Irritant.  
Irritating to eyes, respiratory system, and skin.

For additional information on toxicity, please refer to Section 11.

#### Section 4 - First Aid Measures

##### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

##### Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

##### Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

##### Eye Exposure

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

#### Section 5 - Fire Fighting Measures

**Flash Point:** 129.2 °F 54 °C

**Autoignition Temp:** N/A

##### Extinguishing Media

**Suitable**  
Carbon dioxide, dry chemical powder, or appropriate foam.

##### Firefighting

###### Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

###### Specific Hazard(s)

Emits toxic fumes under fire conditions.

##### Exposure Hazard(s)

###### Material

Irritant.

#### Section 6 - Accidental Release Measures

##### Procedure to be Followed in Case of Leak or Spill

Evacuate area.

##### Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

##### Methods for Cleaning Up

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

#### Section 7 - Handling and Storage

##### Handling

###### User Exposure

Do not breathe vapor. Do not get in eyes, on skin, on clothing.

##### Storage

###### Suitable

Keep tightly closed. Keep away from heat and open flame. Store in a cool dry place.

#### Section 8 - Exposure Controls / PPE

##### Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

##### Personal Protective Equipment

###### Other

Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

##### General Hygiene Measures

Remove and wash contaminated clothing promptly. Wash thoroughly after handling.

#### Section 9 - Physical/Chemical Properties

##### Appearance

###### Color

Very deep brown

###### Form

Clear liquid

Molecular Weight: 161.05 AMU

<u>Property</u>	<u>Value</u>	<u>At Temperature or Pressure</u>
pH	N/A	
BP/BP Range	57 - 58 °C	12 mmHg
MP/MP Range	N/A	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	1.393 g/cm3	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point °F	129.2 °F	Method: closed cup
Flash Point °C	54 °C	Method: closed cup
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	1.539	
Solubility	N/A	

N/A = not available

### Section 10 - Stability and Reactivity

#### Stability

**Materials to Avoid**  
Strong oxidizing agents.

#### Hazardous Decomposition Products

**Hazardous Decomposition Products**  
Carbon monoxide, Carbon dioxide, Hydrogen bromide gas.

### Section 11 - Toxicological Information

#### Route of Exposure

**Skin Contact**  
Causes skin irritation.

#### Multiple Routes

May be harmful by inhalation, ingestion, or skin absorption. Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract.

#### Signs and Symptoms of Exposure

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

RTECS Number:

### Section 12 - Ecological Information

No data available.

### Section 13 - Disposal Considerations

#### Appropriate Method of Disposal of Substance or Preparation

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

### Section 14 - Transport Information

#### DOT

**Proper Shipping Name:** Flammable liquids, n.o.s.

**UN#:** 1993

**Class:** 3

**Packing Group:** Packing Group III

**Hazard Label:** Flammable liquid

**PIH:** Not PIH

#### IATA

**Proper Shipping Name:** Flammable liquid, n.o.s.

**IATA UN Number:** 1993

**Hazard Class:** 3

**Packing Group:** III

### Section 15 - Regulatory Information

#### EU Additional Classification

**Symbol of Danger:** Xi

**Indication of Danger**

Irritant.

**Risk Statements** R: 10 36/37/38

Flammable. Irritating to eyes, respiratory system, and skin.

**Safety Statements** S: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

#### US Classification and Label Text

**Indication of Danger**

Combustible (USA) Flammable (EU). Irritant.

**Risk Statements**

Irritating to eyes, respiratory system, and skin.

**Safety Statements**

Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

#### United States Regulatory Information

SARA Listed: No

#### Canada Regulatory Information

**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** No

**NDSL:** No

### Section 16 - Other Information

#### Disclaimer

For R&D use only. Not for drug, household or other uses.

#### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.