



# **SAFETY DATA SHEET**

Preparation Date: 01/09/2015 Revision Date: Not Applicable Revision Number: Not Applicable

**Product identifier** 

Product code: B1496

Product Name: Bis(4-chlorobutyl) Ether

Other means of identification

Synonyms: 4-Chlorobutyl Ether; 4,4'-Dichlorobutyl Ether; 4,4'-Dichlorodibutyl Ether

CAS #: 6334-96-9

RTECS # KN0400000

CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available. Uses advised against No information available

**Supplier:** Spectrum Chemical Mfg. Corp

14422 South San Pedro St. Gardena, CA 90248

(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone numberChemtrec 1-800-424-9300Contact Person:Martin LaBenz (West Coast)Contact Person:Ibad Tirmiz (East Coast)

# 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Acute toxicity - Oral             | Category 4  |
|-----------------------------------|-------------|
| Skin corrosion/irritation         | Category 2  |
| Serious eve damage/eve irritation | Category 2A |

### Label elements

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### Warning

### Hazard statements

Harmful if swallowed Causes skin irritation Causes serious eye irritation



### Hazards not otherwise classified (HNOC)

Not Applicable

### Other hazards

Not available

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

### **Precautionary Statements - Response**

Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components               | CAS-No.   | Weight % | Trade Secret |
|--------------------------|-----------|----------|--------------|
| Bis(4-chlorobutyl) Ether | 6334-96-9 | 100      | *            |
| 6334-96-9                |           |          |              |

# 4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centers in each State capital city can provide additional

assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. Get medical attention. If skin irritation persists, call a physician.

**Eye Contact:** Flush eye with water for 15 minutes. Get medical attention.

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**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use

mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper

respiratory medical device. Immediate medical attention is required.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms Causes eye irritation. Eye contact may result in redness or pain. Causes skin irritation. Skin

contact may result in redness, pain, inflammation, itching, scaling. Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of

contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

**Extinguishing Media** 

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO2). Water spray mist or

foam.

**Unsuitable Extinguishing Media:**Do not use a solid (straight) water stream as it may scatter

and spread fire.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon oxides, Halogenated compounds, HCl gas

Specific hazards: Container explosion may occur under fire conditions or when

heated

**Special Protective Actions for Firefighters** 

Specific Methods: Water mist may be used to cool closed containers. For

larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal: do not scatter the

material.

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

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### 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact

with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate

protective clothing.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering

drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment**Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite,

dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill

for later disposal.

Methods for cleaning up

Use appropriate tools to put the spilled material in a suitable chemical waste disposal

container. Clean contaminated surface thoroughly.

### 7. HANDLING AND STORAGE

### Precautions for safe handling

### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Keep away from incompatible materials.

### Safe Handling Advice:

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Keep away from heat and sources of ignition.

### **Incompatible Materials:**

Strong oxidizing agents.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Control parameters**

### National occupational exposure limits

### **United States**

| Components                           | OSHA | NIOSH | ACGIH | AIHA WHEEL |
|--------------------------------------|------|-------|-------|------------|
|                                      | None | None  | None  | None       |
| Bis(4-chlorobutyl) Ether - 6334-96-9 |      |       |       |            |

#### Canada

| Components                           | Alberta | British Columbia | Ontario | Quebec |
|--------------------------------------|---------|------------------|---------|--------|
|                                      | None    | None             | None    | None   |
| Bis(4-chlorobutyl) Ether - 6334-96-9 |         |                  |         |        |

### **Australia and Mexico**

| Components | Australia | Mexico |
|------------|-----------|--------|

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| Bis(4-chlorobutyl) Ether | None | None |
|--------------------------|------|------|
| 6334-96-9                |      |      |

# Appropriate engineering controls

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Provide exhaust ventilation or

other engineering controls to keep the airborne

concentrations of vapors and mist below their respective

threshold limit value.

# Individual protection measures, such as personal protective equipment

**Personal Protective Equipment** 

**Eye protection:** Goggles. Safety glasses with side-shields.

**Skin and body protection:** Long sleeved clothing. Chemical resistant apron. Gloves.

**Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and

immediately after handling the product. When using, do not eat, drink or smoke.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance: Color:

Liquid Liquid. Colorless. Pale Yellow.

Odor: Taste Molecular/Formula weight:

No information available No information available 199.12

Formula:Flammability:Flash point (°C):C8H16Cl2ONo information availableNo data available

Flashpoint (°C/°F): Flash Point Tested according to: Lower Explosion Limit (%): 110°C/230°F Not available No information available

Upper Explosion Limit (%): Autoignition Temperature (°C/°F): pH:

No information available No information available No information available

Melting point/range(°C/°F): Boiling point/range(°C/°F): Decomposition temperature(°C/°F):

No information available 132°C/270°F @ 2 kPa No information available

Bulk density: Specific gravity: Vapor pressure @ 20°C (kPa):

No information available No information available No information available

Density (g/cm3): Evaporation rate: Vapor density:

1.08 No information available No information available

VOC content (g/L):Odor threshold (ppm):Partition coefficientNo information availableNo information available(n-octanol/water):

No information available

Viscosity: Miscibility: Solubility:

No information available 
No information available 
No information available

### 10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

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**Chemical stability** 

Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Incompatible materials.

**Incompatible Materials:** Strong oxidizing agents.

Hazardous decomposition products: Carbon oxides. Halogenated compounds. Hydrogen chloride gas.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

### 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:** Eyes. Ingestion. Inhalation. Skin.

# **Acute Toxicity**

# **Component Information**

Bis(4-chlorobutyl) Ether - 6334-96-9

LD50/oral/rat = No information available

LD50/oral/mouse = 1210 mg/kg

LD50/dermal/rat = No information available

LD50/dermal/rabbit = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No infomation available

Other LD50 or LC50information = >100 mg/kg, intraperitoneal, mouse

### **Product Information**

LD50/oral/rat =

**VALUE- Acute Tox Oral =** No information available

LD50/oral/mouse =

Value - Acute Tox Oral = 1210mg/kg

LD50/dermal/rabbit

**VALUE-Acute Tox Dermal =** No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

**VALUE-Vapor =** No information available

VALUE-Gas = No information available

**VALUE-Dust/Mist** = No information available

LC50/Inhalation/mouse

**VALUE-Vapor** = No information available

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VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

**Symptoms** 

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes serious eye irritation.

**Inhalation** May cause irritation of respiratory tract.

**Ingestion** Harmful if swallowed.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available

Sensitization: No information available

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic

| Components               | ACGIH -     | IARC       | NTP        | OSHA HCS -  | Australia - Prohibited | Australia - Notifiable |
|--------------------------|-------------|------------|------------|-------------|------------------------|------------------------|
|                          | Carcinogens |            |            | Carcinogens | Carcinogenic           | Carcinogenic           |
|                          |             |            |            | _           | Substances             | Substances             |
| Bis(4-chlorobutyl) Ether | Not listed  | Not listed | Not listed | Not listed  | Not listed             | Not listed             |

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

**Specific Target Organ Toxicity** 

STOT - single exposure
STOT - repeated exposure
Target Organs:

No information available
No information available

### 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

**Ecotoxicity effects:** No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

**Mobility:** No information available

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# 13. DISPOSAL CONSIDERATIONS

# **Disposal Methods**

# Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

### Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

| Components               | RCRA - F Series<br>Wastes | RCRA - K Series<br>Wastes | RCRA - P<br>Series<br>Wastes | RCRA - U Series Wastes |
|--------------------------|---------------------------|---------------------------|------------------------------|------------------------|
| Bis(4-chlorobutyl) Ether | None                      | None                      | None                         | None                   |

# 14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

Proper Shipping Name: No information available No information available Subsidiary Risk: No information available

Packing Group: None

**ERG No:** No information available

Marine Pollutant

No data available

No information available

**DOT RQ (lbs):** No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
No information available

ADR

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Packing Group:
Subsidiary Risk:
Classification Code:
Description:
No information available

IMO / IMDG

**UN-No:** Not Regulated

No information available **Proper Shipping Name: Hazard Class:** No information available No information available **Subsidiary Risk: Packing Group:** No information available **Description:** No information available **IMDG Page:** No information available **Marine Pollutant** No information available No information available MFAG:

Maximum Quantity: No information available

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# 14. TRANSPORT INFORMATION

### **RID**

**UN-No:** Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Classification Code:
Description:

No information available

### **ICAO**

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
No information available

### **IATA**

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
No information available

### 15. REGULATORY INFORMATION

### **International Inventories**

| Components               | U.S. TSCA | KOREA KECL  | Philippines (PICCS) | Japan ENCS  | CHINA       | Australia<br>(AICS) | EINECS-No.        |
|--------------------------|-----------|-------------|---------------------|-------------|-------------|---------------------|-------------------|
| Bis(4-chlorobutyl) Ether | Present   | Not present | Not present         | Not present | Not present | Not present         | Present 228-713-4 |

### **U.S. Regulations**

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

# Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Components               | Carcinogen | Developmental Toxicity | Male Reproductive | Female Reproductive |
|--------------------------|------------|------------------------|-------------------|---------------------|
|                          |            |                        | Toxicity          | Toxicity:           |
| Bis(4-chlorobutyl) Ether | Not Listed | Not Listed             | Not Listed        | Not Listed          |

### **CERCLA/SARA**

| Components               | CERCLA - Hazardous<br>Substances and their | Section 302 Extremely<br>Hazardous | Section 302 Extremely<br>Hazardous | Section 313 -<br>Chemical Category | Section 313 - Reporting de minimis |
|--------------------------|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
|                          | Reportable Quantities                      | Substances and TPQs                | Substances and RQs                 |                                    |                                    |
| Bis(4-chlorobutyl) Ether | None                                       | None                               | None                               | None                               | None                               |

### U.S. TSCA

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|                          | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|--------------------------|---|--|
| Bis(4-chlorobutyl) Ether | Not Applicable  | Not Applicable                         |

### Canada

### WHMIS hazard class:

D2A Very toxic materials D2B Toxic materials

# **Canada Controlled Products Regulation:**

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

# Inventory

| Components               | Canada (DSL) | Canada (NDSL) |
|--------------------------|--------------|---------------|
| Bis(4-chlorobutyl) Ether | Not Listed   | Present       |

| Components               | CEPA Schedule I - Toxic Substances | CEPA - 2010 Greenhouse Gases Subject to Manditor<br>Reporting |  |
|--------------------------|------------------------------------|---|--|
| Bis(4-chlorobutyl) Ether | Not listed                         | Not listed  |  |

### **EU Classification**

# R-phrase(s)

not determined (not applicable)

# S -phrase(s)

none

| Components               | Classification | Concentration Limits: | Safety Phrases |
|--------------------------|----------------|-----------------------|----------------|
| Bis(4-chlorobutyl) Ether |                | No information        |                |

The product is classified in accordance with Annex VI to Directive 67/548/EEC

# Indication of danger:

None.

# **16. OTHER INFORMATION**

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# 16. OTHER INFORMATION

Preparation Date:01/09/2015Revision Date:Not ApplicablePrepared by:Sonia Owen

**Disclaimer:** All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet** 

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