

## SAFETY DATA SHEET

Preparation Date: 3/02/2015

Revision Date: 10/17/2018

Revision Number: G3

### 1. IDENTIFICATION

#### Product identifier

**Product code:** CH123  
**Product Name:** CHLOROBUTANOL, ANHYDROUS, NF

#### Other means of identification

**Synonyms:** 1,1,1-Trichloro-2-methyl-2-propanol  
 Trichloro-tert-butanol  
 Trichloro-t-butyl alcohol  
 1,1,1-Trichloro-tert-butyl alcohol

**CAS #:** 57-15-8  
**RTECS #** UC0175000  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** Plasticizer for cellulose esters and ethers. Antimicrobial. Preservative.  
**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 number** Chemtrec 1-800-424-9300

**Contact Person:** Martin LaBenz (West Coast)

**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

#### Label elements

##### **Warning**

##### **Hazard statements**

Harmful if swallowed  
 Causes skin irritation

Causes serious eye irritation  
May cause respiratory 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  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Wear protective gloves  
Wear eye/face protection  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

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 water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS-No.	Weight %
Chlorobutanol, Anhydrous	57-15-8	100

**4. FIRST AID MEASURES**

**First aid measures**

**General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

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

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

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

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Irritating to eyes and skin  
Irritating to respiratory system  
Central nervous system effects  
Drowsiness  
Sedation  
Sleepiness

**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 (CO<sub>2</sub>). Water spray mist or foam.

**Unsuitable Extinguishing Media:** No information available.

**Specific hazards arising from the chemical**

**Hazardous Combustion Products:** Carbon Monoxide, Carbon Dioxide. Hydrogen Chloride Gas.

**Specific hazards:** May be combustible at high temperatures.

**Special Protective Actions for Firefighters**

**Specific Methods:** No information available.

**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

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid dust formation. Remove all sources of ignition.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. 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. Avoid dust formation. Keep away from incompatible materials.

**Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. 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.

**Incompatible Materials:**

Oxidizing agents  
Acids  
Acid anhydrides  
Acid chlorides

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

##### United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Chlorobutanol, Anhydrous	57-15-8	None	None	None	None

##### Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Chlorobutanol, Anhydrous	57-15-8	None	None	None	None

### Australia and Mexico

Components	CAS-No.	Australia	Mexico
Chlorobutanol, Anhydrous	57-15-8	None	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

**Eye protection:** Goggles

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

**Respiratory protection:** Effective dust mask. or. Wear respirator with dust filter.

**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:**  
Solid

**Appearance:**  
Crystals. Crystalline.

**Color:**  
Colorless. White.

**Odor:**  
Camphor-like.

**Taste**  
No information available.

**Formula:**  
C4H7Cl3O

**Molecular/Formula weight (g/mole):**  
177.46

**Flammability:**  
No information available

**Flashpoint (°C/°F):**  
No information available.

**Flash Point Tested according to:**  
Not available

**Autoignition Temperature (°C/°F):**  
No information available

**Lower Explosion Limit (%):**  
No information available

**Upper Explosion Limit (%):**  
No information available

**Melting point/range(°C/°F):**  
97-99°C/206.6-210.2°F

**Decomposition temperature(°C/°F):**  
No information available

**Boiling point/range(°C/°F):**  
167°C/332.6°F

**Bulk density:**  
No information available

**Density (g/cm3):**  
No information available

**Specific gravity:**  
No information available

**pH:**  
No information available

**Vapor pressure @ 20°C (kPa):**  
No information available

**Evaporation rate:**

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No information available

**Vapor density:**  
No information available

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
No information available

**Partition coefficient  
(n-octanol/water):**  
log Kow = 2.03

**Viscosity:**  
No information available

**Miscibility:**  
No information available

**Solubility:**  
Insoluble in cold water  
Soluble in hot water  
Soluble in Alcohol  
Soluble in Ether  
Soluble in Glycerol  
Soluble in Chloroform  
Soluble in Acetone

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents  
Reactive with strong acids

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Avoid dust formation. Incompatible materials.

**Incompatible Materials:**  
Oxidizing agents  
Acids  
Acid anhydrides  
Acid chlorides

**Hazardous decomposition products:** Carbon monoxide. Carbon dioxide. Hydrogen chloride.

### 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:**  
Ingestion. Inhalation.

### Acute Toxicity

### Component Information

Chlorobutanol, Anhydrous

CAS-No. 57-15-8

**LD50/oral/rat = 510 mg/kg**

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LD50/oral/mouse = 150 mg/kg  
 LD50/dermal/rabbit = No information available  
 LD50/dermal/rat = No information available  
 LC50/inhalation/rat = No information available  
 LC50/inhalation/mouse = No information available  
 Other LD50 or LC50 information = No information available

**Product Information**

LD50/oral/rat =  
 VALUE- Acute Tox Oral = 510 mg/kg

LD50/oral/mouse =  
 Value - Acute Tox Oral = 150 mg/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  
 VALUE - Gas = No information available  
 VALUE - Dust/Mist = No information available

Symptoms

**Skin Contact:** Causes skin irritation.  
**Eye Contact:** Causes eye irritation.  
**Inhalation** Irritating to respiratory system.  
**Ingestion** Harmful if swallowed. May affect behavior/central nervous system (somnolence, sedation, sleepiness).  
**Aspiration hazard** No information available.

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

**Chronic Toxicity** May be habit forming if ingested for a prolonged period of time.  
**Sensitization:** No information available.  
**Mutagenic Effects:** May affect genetic material  
 Mutations in microorganisms  
 Experiments with bacteria and/or yeast have shown mutagenic effects  
**Carcinogenic effects:** Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable	Australia - Prohibited
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						<b>Carcinogenic Substances</b>	<b>Carcinogenic Substances</b>
Chlorobutanol, Anhydrous	57-15-8	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

**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** No information available.

**STOT - repeated exposure** No information available.

**Target Organs:** Central nervous system.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

**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	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Chlorobutanol, Anhydrous	57-15-8	None	None	None	None

**14. TRANSPORT INFORMATION**

**DOT**

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Class** No information available

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**Packing group:** No information available  
**Emergency Response Guide Number** No information available  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** No Information available  
**Symbol(s):** No information available  
**Description:** No information available

**TDG (Canada)**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No Information available  
**Description:** No information available

**ADR**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Packing Group:** No information available  
**Subsidiary Risk:** No information available

**IMO / IMDG**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No information available

**RID**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available

**ICAO**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available

**IATA**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**ERG Code:** No information available  
**Special Provisions** No information available

**15. REGULATORY INFORMATION**

**International Inventories**

**Product code:** CH123

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Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Chlorobutanol, Anhydrous</i>	57-15-8	Present(ACTIVE)	Present KE-34081	Present	Present (2)-2002	Present [29435]	Present	Present 200-317-6

## 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	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
<i>Chlorobutanol, Anhydrous</i>	57-15-8	Not Listed	Not Listed	Not Listed	Not Listed

## CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
<i>Chlorobutanol, Anhydrous</i>	57-15-8	None	None	None	None	None

## U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
<i>Chlorobutanol, Anhydrous</i>	57-15-8	Not Applicable	Not Applicable

## Canada

### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

## Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
<i>Chlorobutanol, Anhydrous</i>	57-15-8	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
<i>Chlorobutanol, Anhydrous</i>	57-15-8	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting

Chlorobutanol, Anhydrous	57-15-8	Not listed
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## EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Chlorobutanol, Anhydrous	57-15-8	

EU - CLP (1272/2008)

### R-phrase(s)

R22 - Harmful if swallowed.

R36/37/38 - Irritating to eyes, respiratory system and skin.

### S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Chlorobutanol, Anhydrous	57-15-8		No information	

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

### Indication of danger:

Xi - Irritant.

Xn - Harmful.

Xi



Xn



## 16. OTHER INFORMATION

Preparation Date: 3/02/2015  
Revision Date: 10/17/2018  
Prepared 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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