

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name CHLOROBUTANOL HYDROUS NF GRADE
Commercial Name Not available.
Product Use Manufacture of substances
Restrictions On Use Not available
Product Code 30-1201
Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Acute toxicity, Oral (Category 4) Skin irritation (Category 2) Eye irritation (Category 2A) Specific target
CFR 1910.1200 organ toxicity - single exposure (Category 3)

Signal Word WARNING

Hazard Statement(s) Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Pictogram(s) or Symbol(s)

**Precautionary Statement(s):**

Prevention P 261 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 P280 Wear protective gloves/eye protection/face protection.

Response P301 P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. P302 P352 IF ON SKIN: Wash with plenty of soap and water. P304 P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 P351 P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/ physician if you feel unwell. P321 Specific treatment (see supplemental first aid instructions on this label). P330 Rinse mouth. 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.

Storage P403 P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

Disposal P501 Dispose of contents/container to an approved waste disposal plant.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Chlorobutanol NF Hydrous
% By Weight 100
CAS# 6001-64-5
Molecular Weight 186.46 g/mol
Chemical Formula C4H6CL3OH.1/2H2O
Synonym(s) 1,1,1-Trichloro-tert-butyl alcohol Acetone chloroform Chlorobutanol Chloretone ?,?,?-Trichloro-t-butanol
?,?,?-Trichloro-tert-butyl alcoholhemihydrate

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Chlorobutanol NF Hydrous	6001-64-5	100	Not available.	Not available.

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 4: First-Aid Measures

Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact	Wash off with soap and plenty of water. Consult a physician.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Symptoms/Effects	
Acute	Not available
Delayed	Not available
Immediate Medical Attention	
Not available	

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

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

Unsuitable Extinguishing Media

Not available.

Products of Combustion

Carbon oxides, Hydrogen chloride gas

Firefighters Special Equipment and Precautions

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: Accidental Release Measures

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Environmental precautions: Do not let product enter drains. Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. Storage: Keep container tightly closed in a dry and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Not available.
Engineering Controls	Not available.
Personal Protection	Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Hand 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. Eye 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 and body protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 9: Physical and Chemical Properties

Appearance	Colorless to pale yellow Solid.		
Odor	Characteristic		
Odor Threshold	Not available		
Melting Point	78°C	pH	Not available
Freezing Point	Not available	Vapor Pressure	Not applicable.
Boiling Point/Range	Decomposed	Vapor Density	Not available.
Decomposition temperature	Not available.	Viscosity	Not available.
Partition Coefficient: n-octanol/water	Not available.	Evaporation Rate	Not available.
Flash Point	>200°F	Autoignition temperature	Not available.
Flammability	Not available.	Flammability or Explosive Limits:	
		Lower	Not available.
		Upper	Not available.
Solubility(ies)	Soluble in water.		
Other	Not available.		

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	Stable under recommended storage conditions
Hazardous Polymerization	Not available.
Conditions to Avoid	Not available.
Incompatible Materials	Oxidizing agents, acids, Acid chlorides, Acid anhydrides
Hazardous Decomposition Products	Carbon oxides, Hydrogen chloride gas

Section 11: Toxicological Information**RTECS** UC0175000**Acute Toxicity**

Not available.

Skin Corrosion/Irritation

May be harmful if absorbed through skin Causes skin irritation.

Serious Eye Damage/Irritation

Causes eye irritation.

Respiratory or Skin Sensitization

May be harmful if inhaled. Causes respiratory tract irritation.

Germ Cell Mutagenicity

Not available

Carcinogenicity

Not available

Reproductive Toxicity

Not available

Routes of Entry

Eye contact. Inhalation. Ingestion. Skin.

Symptoms Related to Exposure

Central nervous system depression



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

CHLOROBUTANOL HYDROUS NF GRADE

30-1201

Potential Health Effects

May be harmful if swallowed. May be harmful if inhaled. Causes respiratory tract irritation. Causes eye irritation. May be harmful if absorbed through skin causes skin irritation.

Target Organ(s) Inhalation - May cause respiratory irritation Central Nervous system

Section 12: Ecological Information

Ecotoxicity

Not available.

Persistence and Degradability

Not available

Bioaccumulative Potential

Not available

Mobility in Soil

Not available

Other Adverse Effects

Not available

Section 13: Disposal Considerations

Waste Disposal

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Disposal of Container

Dispose of as unused product.

Other Considerations

Not available

Section 14: Transport Information

DOT Classification

Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information

Regulations

OSHA Hazards Target Organ Effect, Harmful by ingestion., Irritant SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components SARA 313: 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 Acute Health Hazard, Chronic Health Hazard Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act. Pennsylvania Right To Know Components 1,1,1-Trichloro-2-methyl-2-propanol hydrate CAS-No. Revision Date 6001-64-5 New Jersey Right To Know Components 1,1,1-Trichloro-2-methyl-2-propanol hydrate CAS-No. Revision Date 6001-64-5 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.

Other

WHMIS CLASS D-2B: Material causing other toxic (Canada) effects (TOXIC); DSCL (EEC) R38- Irritating to skin. R41- Risk of serious damage to eyes.; Gloves.; Lab coat.; Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.; Splash goggles.

Section 16: Other Information



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

CHLOROBUTANOL HYDROUS NF GRADE

30-1201

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Penta's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.