

SAFETY DATA SHEET



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For research and laboratory use only. Not for use in vivo.
Not for drug, food or household use.

Product:	Chloral hydrate
Synonym:	2,2,2-Trichloroethane-1,1-diol

SECTION 2 — HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations



Acute toxicity – Oral (Category 3) - H301: Toxic if swallowed.
Toxic to reproduction, Category 1B – H360: May damage fertility or the unborn child.
Skin corrosion/irritation – Skin irritation (Category 2) - H313+H333, May be harmful if in contact with skin or if inhaled
Serious eye damage/eye irritation – Eye irritation (Category 2A) H319: Causes serious eye irritation
Specific target organ toxicity – Single exposure (Category 3) Central nervous system

2.2 GHS Label elements, including precautionary statements

H301: Toxic if swallowed.
H313+H333, May be harmful if in contact with skin or if inhaled
H319: Causes serious eye irritation
H360: May damage fertility or the unborn child.

Precautionary statement(s)

P280 Wear protective gloves/protective clothing/eye protection/face protection
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use outdoors or in a well-ventilated area.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant

SECTION 3 — COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	CAS Number
2,2,2-Trichloroethane-1,1-diol	100%	302-17-0

SECTION 4 — 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:

May be harmful if inhaled. If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact:

May be harmful if in contact with skin. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact:

Causes serious eye irritation. Flush eyes with water as a precaution.

If swallowed:

May be harmful if swallowed. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5 — FIRE & EXPLOSION DATA

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

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

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Thermal decomposition may produce toxic gases such as carbon monoxide, hydrogen chloride, carbon dioxide, and nitrogen oxides.

Explosion data - sensitivity to mechanical impact

no data available

Explosion data - sensitivity to static discharge

no data available

SECTION 6 — ACCIDENTAL RELEASE MEASURES**Personal precautions**

Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. 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**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place away from incompatible chemicals. Recommended storage temperature: <10 °C

SECTION 8 — EXPOSURE CONTROL/PERSONAL PROTECTION**Personal protective equipment****Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N99 (US) or type P2 (EN 143) 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).

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.

Full contact

Material: Nitrile rubber or Latex gloves

Splash contact

Material: Nitrile rubber or Latex gloves

Eye protection

Face shield and safety glasses 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

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Engineering controls

If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

SECTION 9 — PHYSICAL & CHEMICAL PROPERTIES

Form	Solid	
Odour & Appearance :	White crystalline powder with characteristic odour	
Molecular Weight:	165.40g/mol	
Molecular Formula:	Cl3CCH(OH)2	
Odour Threshold (ppm):	N/A	
Specific Gravity:	N/A	
Vapour Density (air = 1) :	N/A	

Vapour Pressure (mmHg) :	N/A	
Evaporation Rate:	N/A	
Boiling Point (°C) :	N/A	
Freezing Point (°C):	N/A	
pH Coefficient of Water/Oil Distribution:	N/A	

SECTION 10 — STABILITY AND REACTIVITY

Chemically Stable	Yes
Incompatibility:	Strong Oxidizers
Thermal Decomposition/Conditions to be avoided:	Protect from light and heat.
Hazardous Decomposition Products:	Thermal decomposition may produce toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides.

SECTION 11 — TOXICOLOGICAL PROPERTIES

Acute Exposure:	May be harmful by inhalation, ingestion or eye and/or skin absorption. Oral LD50 (mouse): 600mg/kg
Chronic Exposure:	not available
Exposure Limits: (value, source, date)	not available
Irritancy:	May cause irritation to eye, mucous membranes, upper respiratory system, and/or skin.
Sensitization:	not available
Carcinogenicity:	not available
Reproductive Toxicity:	not available
Teratogenicity:	not available
Mutagenicity:	not available
STOT-single exposure	not available
STOT-repeat exposure	not available
Potential Health Hazards	Inhalation- May be harmful if inhaled. May cause respiratory tract irritation Ingestion- May be harmful if swallowed. Skin- May be harmful if absorbed through skin. May cause skin irritation. Eyes- May cause eye irritation.
Synergistic Effects:	not available

SECTION 12 — ECOLOGICAL INFO

Toxicity:	not available
Persistence & degradability:	not available
Bioaccumulation Potential	not available
Waste Disposal:	Dispose of according to local and regional authority requirements.
Mobility in soil:	not available
PBT & vPvB assessment:	not available
Other adverse effects	not available

SECTION 13 — FIRST AID MEASURES

These disposal guidelines are for catalog-sized quantities only. Federal regulations may apply to empty container. Provincial and/or local guidelines may be different. Dispose in accordance with regulations or by a licensed disposal company.

SECTION 14 — TRANSPORT INFO

TDG:

Toxic Solid
DOT Hazard Class: 6.1 POISON
UN#: 2811
Packing Group: III



SECTION 15 — REGULATORY INFO

This compound has been classified in accordance with the hazard criteria of; Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16 — OTHER INFO

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Preparation Date:	2021-05-03

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user. Syntharise Chemical Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.