



GLYCEROL A-CHLORO HYDRIN CAS No 96-24-2	MATERIAL SAFETY DATA SHEET SDS/MSDS
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Glycerol A-Chloro Hydrin

CAS-No. : 96-24-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi -110002
INDIA

Telephone : +91 11 49404040
Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 2), H300
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 4), H312
Serious eye damage (Category 1), H318
Carcinogenicity (Category 2), H351
Reproductive toxicity (Category 1B), H360

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H300
H312

Fatal if swallowed.
Harmful in contact with skin.

H318	Causes serious eye damage.
H331	Toxic if inhaled.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/ eye protection/ face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	
	none
Restricted to professional users.	

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : -Chlorohydrin
-Monochlorohydrin
-Glycerol chlorohydrin
3-MCPD

Formula : C₃H₇ClO₂
Molecular weight : 110.54 g/mol
CAS-No. : 96-24-2
EC-No. : 202-492-4

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
3-Chloropropane-1,2-diol		
CAS-No.	96-24-2	Acute Tox. 2; Acute Tox. 3; Acute Tox. 4; Eye Dam. 1; Carc. 2; Repr. 1B; H300, H331, H312, H318, H351, H360
EC-No.	202-492-4	
		<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

hygroscopic Store under inert gas.

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

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.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|---|---|
| a) Appearance | Form: clear, viscous liquid
Colour: light yellow |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/freezing point | No data available |
| f) Initial boiling point and boiling range | 213 °C - lit. |
| g) Flash point | 113 °C - closed cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure | 0.04 mmHg at 25 °C |
| l) Vapour density | No data available |

m)	Relative density	1.322 g/cm ³ at 25 °C
n)	Water solubility	No data available
o)	Partition coefficient: n-octanol/water	log Pow: -0.53
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid moisture.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 26 mg/kg(3-Chloropropane-1,2-diol)

Remarks: Behavioral:Somnolence (general depressed activity). Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

LD50 Dermal - Rabbit - 1,056 mg/kg(3-Chloropropane-1,2-diol)

Skin corrosion/irritation

No data available(3-Chloropropane-1,2-diol)

Serious eye damage/eye irritation

Eyes - Rabbit(3-Chloropropane-1,2-diol)

Result: Severe eye irritation

Respiratory or skin sensitisation

No data available(3-Chloropropane-1,2-diol)

Germ cell mutagenicity

No data available(3-Chloropropane-1,2-diol)

Carcinogenicity

No data available(3-Chloropropane-1,2-diol)

IARC: 2B - Group 2B: Possibly carcinogenic to humans (3-Chloropropane-1,2-diol)

Reproductive toxicity

No data available(3-Chloropropane-1,2-diol)

Specific target organ toxicity - single exposure

No data available(3-Chloropropane-1,2-diol)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(3-Chloropropane-1,2-diol)

Additional Information

RTECS: TY4025000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(3-Chloropropane-1,2-diol)

SECTION 12: Ecological information**12.1 Toxicity**

No data available

12.2 Persistence and degradability

Biodegradability Result: - Not readily biodegradable.

Biochemical Oxygen Demand (BOD) 980 mg/g(3-Chloropropane-1,2-diol)

Chemical Oxygen Demand (COD) 10 mg/g(3-Chloropropane-1,2-diol)

Ratio BOD/ThBOD 68 %(3-Chloropropane-1,2-diol)

12.3 Bioaccumulative potential

Does not bioaccumulate.

12.4 Mobility in soil

No data available(3-Chloropropane-1,2-diol)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological information Avoid release to the environment.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

