

Material Safety Data Sheet

1. Composition/information on ingredients

Product Name: 2-Hydrazino-1-ethanol
Synonyms:
Company Identification: Shanghai IS Chemicals Technology LTD.
Address: Shanghai Torch innovation Park of Fine Chemical Industry,
No. 688 Qiushi Road, Jinshan District, Shanghai China, Zip, 201512
Telephone Number: 86-21-52685808
Fax Number: 86-21-52685809

2. Identification of the substance

Catalog Number: I14-0243
CAS # : 109-84-2
Purity: 98.0%
EI NECS#

3. Hazards identification

EMERGENCY OVERVIEW

Toxic by inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect. The toxicological properties of this material have not been fully investigated.

Potential Health Effects

Eye:

May cause eye irritation. The toxicological properties of this material have not been fully investigated.

Skin:

May cause skin irritation. The toxicological properties of this material have not been fully investigated.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation:

May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

Chronic:

No information found.

4. First aid measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

5. Fire fighting measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Combustible liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Use agent most appropriate to extinguish fire.

6. Accidental release measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

7. Handling and storage

Handling:

Wash thoroughly after handling. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed

container. Store in a cool, dry, well-ventilated area away from incompatible substances.

8. Exposure Controls / PPE

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 109-84-2:

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. Physical and chemical properties

Physical State: Liquid

Color: Colorless

Odor: None reported.

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 218.0 - 220.0 deg C @ 754.00m

Freezing/Melting Point: -70 deg C

Autoignition Temperature: Not available.

Flash Point: 73 deg C (163.40 deg F)

Explosion Limits, lower: N/A

Explosion Limits, upper: N/A

Decomposition Temperature:

Solubility in water: soluble

Specific Gravity/Density: 1.1190g/cm³

Molecular Formula: C₂H₈N₂O

Molecular Weight: 76.10

10. Stability and reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials:

Oxidizing agents.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

Hazardous Polymerization: Has not been reported.

11. Toxicological information

RTECS#:

CAS# 109-84-2: KL2800000

LD50/LC50:

CAS# 109-84-2: Oral, mouse: LD50 = 139 mg/kg.

Carcinogenicity:

2-Hydroxyethylhydrazine -

Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

12. Ecological information

Not available.

13. Disposal consideration

Dispose of in a manner consistent with federal, state, and local regulations.

14. Transportation information

IATA

*Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S.**

Hazard Class: 6.1

UN Number: 2810

Packing Group: III

IMO

Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: 2810

Packing Group: III

RID/ADR

Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: 2810

Packing group: III

15. Regulatory information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 40 Limited evidence of a carcinogenic effect.

Safety Phrases:

S 28A After contact with skin, wash immediately with plenty of water.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 109-84-2: No information available.

Canada

CAS# 109-84-2 is listed on Canada's NDSL List.

CAS# 109-84-2 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 109-84-2 is listed on the TSCA inventory.

16. Other information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary