



MATERIAL SAFETY DATA SHEET

SECTION 1. Chemical Product and Company Identification 4-hydroxy Nonenal Mercapturic Acid

Product Code: 32110 , **Reference #:** AUTOX

Product Name: 4-hydroxy Nonenal Mercapturic Acid

CAS Number: 146764-24-1

Chemical Family: Autoxidation

Synonyms

N-acetyl-S-(tetrahydro-5-hydroxy-2-pentyl-3-furanyl)-L-cysteine

Manufacturer Name and Address:

Cayman Chemical Company
1180 E. Ellsworth Rd.

Cayman Chemical Company

Ann Arbor, MI. 48108

Telephone Numbers:

(800)364-9897

(734)971-3335

Dates:

Date Entered: 06/27/1996

Revision: 08/29/2002

Printed: 08/29/2002

SECTION 2. Composition/Information on Ingredients 4-hydroxy Nonenal Mercapturic Acid

Hazardous Components (Specific Chemical Identity/Common Name)

Name: 4-hydroxy Nonenal

CAS #: 18286-49-2

OSHA PEL: No data.

Percentage: 1.0 %

ACGIH TLV: No data.

Name: Ethyl alcohol

CAS #: 64-17-5

OSHA PEL: No data.

Percentage: 99.0 %

ACGIH TLV: No data.

SECTION 3. Hazards Identification 4-hydroxy Nonenal Mercapturic Acid

Emergency Overview

No data available.

Route(s) of Entry: Inhalation? Yes , Skin? Yes , Eyes? Yes , Ingestion? Yes , Other: Injection

Potential Health Effects (Acute and Chronic)

Contact may cause skin or eye irritation.

Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption.

The toxicological properties of this compound have not been fully evaluated.

Carcinogenicity: NTP? No , IARC Monographs? No , OSHA Regulated? No

Carcinogenicity/Other Information

No data available.

Signs and Symptoms Of Exposure

Irritating to the skin, eyes, nose, throat, and respiratory tract.

SECTION 4. First Aid Measures

4-hydroxy Nonenal Mercapturic Acid

Emergency and First Aid Procedures

If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention.

In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel.

In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

Note to Physician

No data available.

Medical Conditions Generally Aggravated By Exposure

No data available.

SECTION 5. Fire Fighting Measures 4-hydroxy Nonenal Mercapturic Acid

Flash Pt: NE or NA **Method Used:** No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NE or NA **Extinguishing Media**

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray when fighting fires involving this material.

Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

Note: Flammable as diluted in ethanol.

Flammable Properties and Hazards

Container explosion may occur under fire conditions.

Emits toxic or corrosive fumes under fire conditions.

Flammable liquid.

Can release vapors that form explosive mixtures at temperatures at or above the flashpoint.

Vapors can travel to a source of ignition and flash back.

Hazardous Combustion Products

carbon dioxide

carbon monoxide

SECTION 6. Accidental Release Measures 4-hydroxy Nonenal Mercapturic Acid

Steps To Be Taken In Case Material Is Released Or Spilled

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

After removal, ventilate contaminated area and flush thoroughly with water.

SECTION 7. Handling and Storage 4-hydroxy Nonenal Mercapturic Acid

Hazard Label Information:

Avoid contact with skin and eyes. Do not reuse this container.

Use with adequate ventilation. Wash thoroughly after handling.

Precautions To Be Taken in Handling

Avoid contact with skin and eyes.

Do not reuse this container.

Keep away from sources of ignition.

Use with adequate ventilation.

Wash thoroughly after handling.

Precautions To Be Taken in Storing

Store at correct temperature.

Other Precautions

No data available.

Work/Hygienic/Maintenance Practices

Do not take internally.

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Wash thoroughly after handling.

SECTION 8. Exposure Controls/Personal Protection
4-hydroxy Nonenal Mercapturic Acid

Protective Equipment Summary - Hazard Label Information

Eye wash station in work area Lab coat Latex disposable gloves

Safety glasses Safety shower in work area Vent Hood

Respiratory Equipment (Specify Type)

No data available.

Eye Protection

Safety glasses

Protective Gloves

Latex disposable gloves

Other Protective Clothing

Lab coat

Engineering Controls (Ventilation etc.)

Good general ventilation should be sufficient to control airborne levels.

SECTION 9. Physical and Chemical Properties
4-hydroxy Nonenal Mercapturic Acid

Physical States:	[] Gas , [X] Liquid , [] Solid
Boiling Point:	NE or NA
Melting Point:	NE or NA
Specific Gravity (Water = 1):	No data.
Density:	No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Evaporation Rate (vs Butyl Acetate=1):	No data.
Solubility in Water:	>100 ug/ml* at 25.0 C
Other Solubility Notes:	*PBS pH 7.2, sol. in DMF, DMSO & EtOH
Percent Volatile:	NE or NA
Saturated Vapor Concentration:	No data.
Viscosity:	No data.
Molecular Formula:	C14H25NO5S
Molecular Weight:	319.40
pH:	No data.
Appearance and Odor	A clear, colorless solution

SECTION 10. Stability and Reactivity
4-hydroxy Nonenal Mercapturic Acid

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability

No data available.

Incompatibility - Materials To Avoid

No data available.

Hazardous Decomposition Or Byproducts

carbon dioxide

carbon monoxide

Hazardous Polymerization: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Polymerization

No data available.

SECTION 11. Toxicological Information
4-hydroxy Nonenal Mercapturic Acid

The toxicological effects of this compound have not been thoroughly studied.

Chronic Toxicological Effects

No data available.

SECTION 12. Ecological Information
4-hydroxy Nonenal Mercapturic Acid

Runoff from fire control or dilution water may cause pollution.

SECTION 13. Disposal Considerations
4-hydroxy Nonenal Mercapturic Acid

Waste Disposal Method

Dispose in accordance with local, state and federal regulations.

SECTION 14. Transport Information
4-hydroxy Nonenal Mercapturic Acid

DOT Proper Shipping Name

Ethyl alcohol

DOT Hazard Class: 3

DOT Hazard Label: FLAMMABLE LIQUID

UN/NA Number: 1170

Additional Transport Information

Transport in accordance with local, state, and federal regulations.

SECTION 15. Regulatory Information
4-hydroxy Nonenal Mercapturic Acid

Regulatory information on this product is not available.

SECTION 16. Other Information
4-hydroxy Nonenal Mercapturic Acid

For research use only, not for human or veterinary clinical use.

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