

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 **Revision date: 07/06/2018**

1. IDENTIFICATION

Product name: 1-Dodecanethiol

Product code: D0970

For laboratory research purposes. Product use: Restrictions on use: Not for drug or household use.

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Portland, OR 97203 U.S.A. Telephone:

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+1-888-520-1075 / +1-503-283-1987

e-mail:

sales-US@TCIchemicals.com www.TCIchemicals.com

Emergency telephone number:

Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies:

Chemtrec 24-Hour

+1-800-424-9300 (U.S.A.)

+1-703-527-3887 (International) Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

WHMIS 2015:

Eye Damage/Irritation [Category 1] Sensitization - Skin [Category 1] Aquatic Hazard (Acute) [Category 1] Aquatic Hazard (Long-Term) [Category 1] Skin Corrosion/Irritation [Category 1C]

Signal word: Danger!

Hazard Statement(s): Causes severe skin burns and eye damage

May cause an allergic skin reaction

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

[Prevention]

Do not breathe dusts or mists. Avoid release to the environment. Contaminated work clothing must not be allowed out of the workplace. Wash hands and face thoroughly after handling. Wear protective

gloves, protective clothing, face protection.

[Response]

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. Collect spillage.

Store locked up.

[Storage] [Disposal]

Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

None.

1-Dodecanethiol **TCI AMERICA** Page 2 of 5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Substance/mixture: Components: 1-Dodecanethiol Percent: >95.0%(GC) CAS RN: 112-55-0 Molecular Weight: 202.40 **Chemical Formula:** C12H26S

Synonyms: Dodecyl Mercaptan, Lauryl Mercaptan

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Skin contact:

Immediately call a POISON CENTER or doctor/physician.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Eye contact:

Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. Ingestion:

Symptoms/effects:

Acute: Pain. Redness.

Delayed: May cause skin sensitization.

Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, carbon dioxide. Unsuitable extinguishing media: Water (It may scatter and spread fire.)

Specific hazards arising from the Hazardous combustion products:

Other specific hazards:

chemical:

These products include: Carbon oxides Sulfur oxides Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Environmental precautions:

Methods and materials for containment

and cleaning up:

Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent Precautions for safe handling:

generation of vapour or mist. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Store under inert gas. Store locked up.

Store away from incompatible materials such as oxidizing agents.

Air-sensitive

Packaging material: Comply with laws. 1-Dodecanethiol **TCI AMERICA** Page 3 of 5

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

ACGIH TLV(TWA): 0.1 ppm (sen)

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed Appropriate engineering controls:

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Respiratory protection:

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Safety goggles. A face-shield, if the situation requires. Eye protection:

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid Form: Clear

Colour: Colorless - Very pale yellow

Odour: Characteristic Odor threshold: No data available No data available Odour threshold:

Melting point/freezing point: -7°C (19°F) No data available 277°C (531°F) Boiling point/range: Vapour pressure: No data available.

Decomposition temperature: No data available Vapour density: 7.0 **Dynamic Viscosity:** No data available

Relative density: 0.85

Kinematic viscosity: No data available **Evaporation rate(Butyl** No data available

No data available Log Pow: Acetate=1):

230°C (446°F) 128°C (262°F)

Flash point: Autoignition temperature: Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: No data available

Upper: No data available

Solubility(ies):

Insoluble [Water]

[Other solvents]

Soluble: Methanol, Ether, Benzene, Acetone, Ethanol, Ethyl acetate

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions. Possibility of hazardous reactions: No special reactivity has been reported.

Oxidizing agents, Acids, Strong bases, Reducing agents, Alkali metals Incompatible materials:

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Sulfur oxides 1-Dodecanethiol TCI AMERICA Page 4 of 5

11. TOXICOLOGICAL INFORMATION

RTECS Number: JR3155000

Acute Toxicity: No data available

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

cyt-rat-ihl 5020 ug/m3/16W

Carcinogenicity: No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

Target organ(s): No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence / degradability:

Bioaccumulative potential(BCF):

Mobility in soil

No data available

360

 Log Pow:
 6.18

 Soil adsorption (Koc):
 1.1 x 10⁴

 Henry's Law (PaM ³/mol):
 5977

13. DISPOSAL CONSIDERATIONS

Disposal of product:

Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

be allowed to enter the environment, drains, water ways, or the soil.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

1-Dodecanethiol TCI AMERICA Page 5 of 5

14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN1760 Corrosive liquids, n.o.s 8 Corrosive material

<u>IATA</u>

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN1760 Corrosive liquid, n.o.s 8 Corrosive material II

<u>IMDG</u>

UN UN1760 Proper Shipping Name: Class or Division: Packing Group:

numb Corrosive liquid, n.o.s 8 Corrosive material III er:

EmS number: F-A, S-B

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed SARA 302: Not Listed

State Regulations
State Right-to-Know

MassachusettsNot ListedNew JerseyListedPennsylvaniaListedCalifornia Proposition 65:Not Listed

Other Information

NFPA Rating:HMIS Classification:Health:3Health:3Flammability:1Flammability:1Instability:0Physical:0

International Inventories

 Canada: DSL
 On DSL

 EC-No:
 203-984-1

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.