

TCI AMERICA SAFETY DATA SHEET

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

1. IDENTIFICATION

Product name: Decahydronaphthalene (cis- and trans- mixture)

Product code:

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

Company: TCI America

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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: Acute Toxicity - Inhalation [Category 3]

Eye Damage/Irritation [Category 1] WHMIS 2015:

Specific Target Organ Toxicity (Single Exposure) [Category 2]

Aspiration Hazard [Category 1] Flammable Liquids [Category 3] Aquatic Hazard (Acute) [Category 1] Aquatic Hazard (Long-Term) [Category 1] Skin Corrosion/Irritation [Category 1C]

Danger! Signal word:

Hazard Statement(s): Flammable liquid and vapor

Toxic if inhaled

Causes severe skin burns and eye damage May be fatal if swallowed and enters airways

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects May cause damage to organs: Central Nervous System

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist, vapors or spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not eat, drink or smoke when using this product. 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. If exposed or concerned: Call a poison center or doctor. In case of fire: Use dry chemical, dry sand or foam to extinguish. Collect

[Storage]

[Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: Decahydronaphthalene (cis- and trans- mixture)

Percent: >97.0%(GC) CAS RN: 91-17-8 Molecular Weight: 138.25 **Chemical Formula:** C10H18

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.

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

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.

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

Symptoms/effects:

Acute: Cough. Pain. Redness. Delayed: No data available

Indication of any immediate medical attention:

Not available. Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

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

Hazardous combustion products:

These products include: Carbon oxides Other specific hazards: 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 extra personal protective equipment (self-contained breathing apparatus). 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.

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 dry sand or inert absorbent before recovering it into an airtight container. 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.

Prevention of secondary hazards:

Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use

spark-proof tools and explosion-proof equipment.

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. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. 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.

Confirm in advance if peroxides exist when operations involving heating such as distillation are carried

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Light-sensitive

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

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

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 - Almost colorless

Mint-like Odour:

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

Melting point/freezing point: No data available No data available pH: Boiling point/range: 190°C (374°F) Vapour pressure: No data available.

Decomposition temperature: No data available Vapour density: 4 76 **Dynamic Viscosity:** No data available

Relative density:

Kinematic viscosity: No data available

Log Pow: No data available **Evaporation rate(Butyl** No data available

Acetate=1):

58°C (136°F) Autoignition temperature: 250°C (482°F) Flash point:

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: 0.7% Upper: 4.9%

Solubility(ies): [Water] Insoluble (0.889mg/L, 25°C)

[Other solvents]

Miscible: Esters, Ketones

Very soluble: Ether, Alcohols, Chloroform

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: May form explosive peroxides.

Possibility of hazardous reactions: No special reactivity has been reported. Spark, Open flame, Static discharge, Air Conditions to avoid:

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon dioxide, Carbon monoxide

11. TOXICOLOGICAL INFORMATION

RTECS Number: QJ3150000

Acute Toxicity:

ihl-hmn TCLo:100 ppm ihl-rat LC50:710 ppm/4H orl-rat LD50:4170 mg/kg skn-rbt LD50:5900 uL/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

ihl-mus TCLo:50 ppm/24H/90D-C ihl-rat TCLo:5 ppm/24H/90D-C

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

Reproductive toxicity:

No data available

Aspiration hazard: May be fatal if swallowed and enters airways.

Target organ(s):

May cause damage to organs: Central Nervous System

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: 96h LC50:0.37 mg/L (Oryzias latipes) 48h LC50:1.84 mg/L (Oryzias latipes)

Crustacea: 48h EC50:0.23 mg/L (Daphnia magna)

Algae: 72h EC50:>0.051 mg/L (Selenastrum capricornutum)

Persistence / degradability: 2 % (by BOD), 3%(trans-), 5% (cis-) (by GC)

Bioaccumulative potential(BCF):

No data available

Mobility in soil

Log Pow: 4.6 Soil adsorption (Koc): 4600 Henry's Law (PaM ³/mol): 4.7 x 10⁴

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.

14. TRANSPORT INFORMATION

DOT (US)

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

UN1147 Decahydronaphthalene 3 Flammable liquid

<u>IATA</u>

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

UN1147 Decahydronaphthalene 3 Flammable liquid II

<u>IMDG</u>

UN UN1147 Proper Shipping Name: Class or Division: Packing Group:

numb Decahydronaphthalene 3 Flammable liquid III er:

EmS number: F-E, S-D

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

Massachusetts
New Jersey
Pennsylvania
California Proposition 65:
Listed
Not Listed

Other Information

NFPA Rating:HMIS Classification:Health:3Health:3Flammability:2Flammability:2Instability:0Physical:0

International Inventories

 Canada: DSL
 On DSL

 EC-No:
 202-046-9

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.