

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

1. IDENTIFICATION

Product name: Product code:

Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

1H-Tridecafluorohexane T2496

For laboratory research purposes. Not for drug or household use.

TCI AMERICA

SAFETY DATA SHEET

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: | Not classifiable |
|---|------------------|
| Signal word: | None |
| Hazard Statement(s): | None |
| Pictogram(s) or Symbol(s): | None |
| Precautionary Statement(s): | None |
| Hazards not otherwise classified: [HNOC] | None. |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substance/mixture: Components: | Substance 1H-Tridecafluorohexane |
|-----------------------------------|-------------------------------------|
| Percent: | >97.0%(GC) |
| CAS RN: | 355-37-3 |
| Molecular Weight: | 320.05 |
| Chemical Formula: | C6HF13 |
| Synonyms: | 1H-Perfluorohexane |

| 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. Get medical | | |
| Skin contact: | advice/attention if you feel unwell. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Get medical advice/attention if you feel unwell. Rinse mouth. | | |
| Eye contact: | | | |
| Ingestion: | | | |
| Symptoms/effects: | | | |
| Acute: | No data available | | |
| Delayed: | No data available | | |
| Indication of any immediate medical atte | ention: | | |
| Not available. Notes to physician: | | | |
| No data available | | | |
| 5. FIRE-FIGHTING MEASURES | | | |
| Suitable extinguishing media: | Dry chemical, foam, water spray, carbon dioxide. | | |
| Specific hazards arising from the chemical: | Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. | | |
| Hazardous combustion products: | These products include: Carbon oxides Halogenated compounds | | |
| Other specific hazards: | WARNING: Highly toxic HF gas is produced during combustion. | | |
| Advice for firefighters: | Wear self-contained breathing apparatus if possible. | | |
| 6. ACCIDENTAL RELEASE MEASU | RES | | |
| 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. | | |
| Environmental precautions: | Prevent product from entering drains. | | |
| Methods and materials for containment and cleaning up: | 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 | | | |
| Precautions for safe handling: | Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing. | | |
| Conditions for safe storage, including a | ny incompatibilities | | |
| Storage conditions: | Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. | | |
| Packaging material: | Comply with laws. | | |
| 8. EXPOSURE CONTROLS / PERSC | NAL PROTECTION | | |
| | | | |
| Appropriate engineering controls: | Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. | | |
| Personal protective equipment | | | |
| Respiratory protection: | Vapor respirator. Follow local and national regulations. | | |

| Respiratory protection: | Vapor respirator. Follow local and national regulations. |
|---------------------------|---|
| Hand protection: | Protective gloves. |
| Eye protection: | Safety glasses. A face-shield, if the situation requires. |
| Skin and body protection: | Protective clothing. Protective boots, if the situation requires. |
| Eye protection: | Safety glasses. A face-shield, if the situation requires. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state (20°C): | | Liquid | | | |
|-----------------------------------|----------------------------|---------------------------------|-----------------------------------|--------------------|--|
| Form: | , , , , , , , , , , | | | | |
| Colour: | | Colorless - Very pale yellow | v | | |
| Odour: | | No data available | | | |
| Odor threshold: | | No data available | | | |
| Odour threshold: | | No data available | | | |
| | | | | | |
| Melting point/freezing point: | No da | ita available | pH: | No data available | |
| Boiling point/range: | 70°C | (158°F) | Vapour pressure: | No data available. | |
| Decomposition temperature: | No da | ita available | Vapour density: | No data available | |
| Relative density: | 1.69 | | Dynamic Viscosity: | No data available | |
| Kinematic viscosity: | No da | ita available | | | |
| Log Pow: | No da | ita available | Evaporation rate(Butyl | No data available | |
| - | | | Acetate=1): | | |
| Flash point: | No da | ita available | Autoignition temperature: | No data available | |
| Flammability(solid, gas): | | ita available | Flammability or explosive limits: | | |
| i lainnabinty(cona, gao). | 110 00 | | Lower: | No data available | |
| | | | Upper: | No data available | |
| Solubility(ies): | | | oppen. | | |
| [Water] | | No data available | | | |
| [Other solvents] | | No data available | | | |
| [ether certenie] | | | | | |
| 10. STABILITY AND REACT | IVITY | | | | |
| | | | | | |
| Reactivity: | | No data available | | | |
| Chemical stability: | | Stable under proper conditions. | | | |
| Possibility of hazardous reaction | ons: | No special reactivity has been | | | |
| Incompatible materials: | | Oxidizing agents | | | |
| Hazardous decomposition proc | lucts: | Carbon dioxide, Carbon mo | noxide, Hydrogen fluoride | | |
| | | | | | |
| 11. TOXICOLOGICAL INFOR | RMATIC | Ν | | | |
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| | | | | | |
| | | | | | |
| Acute Toxicity: | | | | | |
| No data available | | | | | |
| | | | | | |
| Skin corrosion/irritation: | | | | | |
| No data available | | | | | |
| Serious eye damage/irritation: | | | | | |
| No data available | | | | | |
| | | | | | |
| Respiratory or skin sensitizatio | n: | | | | |
| No data available | | | | | |
| | | | | | |
| | | | | | |

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

IARC: No data available

Reproductive toxicity: No data available

Target organ(s):

No data available

NTP:

No data available

OSHA:

No data available

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12. ECOLOGICAL INFORMATION

| Ecotoxicity: | |
|---|---|
| Fish: | No data available |
| Crustacea: | No data available |
| Algae: | No data available |
| Persistence / degradability: | No data available |
| Bioaccumulative potential(BCF): Mobility in soil | No data available |
| Log Pow: | No data available |
| Soil adsorption (Koc): | No data available |
| Henry's Law (PaM ³/mol): | No data available |
| 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. |
| Other considerations: | Observe all federal, state and local regulations when disposing of the substance. |
| 14. TRANSPORT INFORMATION | |
| DOT (US) | Non-hazardous for transportation. |
| IATA | Non-hazardous for transportation. |

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

Non-hazardous for transportation.

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations

IMDG

| CERCLA Hazardo | | ce and Reportable Quantity: | |
|--------------------|------------|-----------------------------|-----------------|
| SARA 313: | | Not Listed | |
| SARA 302: | | Not Listed | |
| State Regulation | <u>s</u> | | |
| State Right-to-Kr | now | | |
| Massachuse | tts | Not Listed | |
| New Jersey | | Not Listed | |
| Pennsylvania | a | Not Listed | |
| California Propos | sition 65: | Not Listed | |
| Other Information | <u>n</u> | | |
| NFPA Rating: | | HMIS | Classification: |
| Health: | 0 | Hea | lth: 0 |
| Flammability: | 0 | Flar | mmability: 0 |
| Instability: | 0 | Phy | vsical: 0 |
| International Inve | entories | | |
| EC-No: | | 206-581-9 | |

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.