

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

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: WHMIS 2015:

Signal word:

Hazard Statement(s):

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal]

Hazards not otherwise classified: [HNOC] (R)-(-)-1-Cyclohexylethylamine C1541

TCI AMERICA

SAFETY DATA SHEET

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

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

Eye Damage/Irritation [Category 1] Flammable Liquids [Category 3] Skin Corrosion/Irritation [Category 1B]

Danger!

Flammable liquid and vapor Causes severe skin burns and eye damage

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 dusts or mists. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection. 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. In case of fire: Use dry chemical, dry sand or foam to extinguish.

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Keep container tightly

Store in a well-ventilated place. Keep cool. Store locked up. 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.).

None.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substance/mixture: | Substance |
|--|---|
| Components: | (R)-(-)-1-Cyclohexylethylamine |
| Percent: | >98.0%(GC)(T) |
| CAS RN: | 5913-13-3 |
| Nolecular Weight: | 127.23 |
| Chemical Formula: | C8H17N |
| Synonyms: | (R)-(-)-(1-Aminoethyl)cyclohexane |
| | |
| 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. |
| Eye contact: | 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/physician. |
| Ingestion: | Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. |
| ingestion. | |
| Symptoms/effects: | |
| Acute: | Pain. Redness. |
| Delayed: | No data available |
| No data available 5. FIRE-FIGHTING MEASURES | |
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| Suitable extinguishing media: | Dry chemical, foam, carbon dioxide. |
| Unsuitable extinguishing media: | Water (It may scatter and spread fire.) |
| Creating horondo anisina from the | Take age as it may decompose upon combustion or in high temperatures to consiste poissoous fumo |
| 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 Nitrogen 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 MEASU | RFS |
| | |
| Personal precautions, protective | Use extra personal protective equipment (self-contained breathing apparatus). Keep people away fror |
| equipment and emergency procedures: | 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: | case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be |
| and oreaning up. | 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 | |
| | |
| Precautions for safe handling: | Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfacesNo smoking. Tak |

and face thoroughly after handling.

Hygroscopic Air-sensitive Comply with laws.

Conditions for safe storage, including any incompatibilities

Storage conditions:

Packaging material:

Avoid contact with skin, eyes and clothing.

measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands

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

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

Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents. Page 2 of 5

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Appropriate engineering controls: | Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed 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. |
| Eye protection: | Safety goggles. A face-shield, if the situation requires. |
| Skin and body protection: | Impervious protective clothing. Protective boots, if the situation requires. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold: | Liquid Clear Colorless - Very pale yellow No data available No data available No data available | , | |
|---|--|--|--|
| Melting point/freezing point: | No data available | pH: | No data available |
| Boiling point/range: | 60°C /1.6kPa (140°F) | Vapour pressure: | No data available. |
| Decomposition temperature: | No data available 0.87 | Vapour density: | No data available No data available |
| Relative density: Kinematic viscosity: | No data available | Dynamic Viscosity: | |
| Log Pow: | No data available | Evaporation rate(Butyl Acetate=1): | No data available |
| Flash point: Flammability(solid, gas): | 51°C (124°F) No data available | Autoignition temperature: Flammability or explosive limits: | No data available |
| | | Lower: | No data available |
| | | Upper: | No data available |
| Solubility(ies): | | | |
| [Water] | No data available | | |
| [Other solvents] | No data available | | |

10. STABILITY AND REACTIVITY

Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products:

No data available Stable under proper conditions. No special reactivity has been reported. Spark, Open flame, Static discharge Oxidizing agents, Strong acids Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

| 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: No data available | | | | |
| 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: | 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: | | a if possible. It is the gener | tor'a rooponaihility to | comply with Endered State and |
| 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. | | | |
| | Identification and I | Listing of Hazardous Waste | are listed in 40 CFR | Parts 261. The product should not |

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14. TRANSPORT INFORMATION

| DOT (US) UN number: UN2734 | Proper Shipping Name: Amine, liquid, corrosive, flammable, n.o.s | Class or Division: 8 Corrosive material | Subrisk(s): 3 Flammable liquid | Packing Group: |
|----------------------------------|---|---|--|----------------------|
| IATA UN number: UN2734 | Proper Shipping Name: Amines, liquid, corrosive, flammable, n.o.s | Class or Division: 8 Corrosive material | Subrisk(s): 3 Flammable liquid | Packing Group: |
| IMDG UN UN2734 numb er: | Proper Shipping Name: Amines, liquid, corrosive, flammable, n.o.s | Class or Division: 8 Corrosive material | Subrisk(s): 3 Flammable liquid | Packing Group: II |
| EmS number: | F-E, S-C | | | |

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:

(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

| CERCLA Hazard | ous substance a | nd 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 Proposition 65: | | Not Listed | | |
| Other Informatio | <u>n</u> | | | |
| NFPA Rating: | | | HMIS Classification: | |
| Health: | 1 | | Health: | 1 |
| Flammability: | 2 | | Flammability: | 2 |
| Instability: | 0 | | Physical: | 0 |
| International Invo | entories | | | |
| EC-No: | | 227-634-2 | | |
| 16. OTHER INF | ORMATION | | | |

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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.