

Paushak Limited

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

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| Product name | : | trans-4-Methylcyclohexyl Isocyanate |
| CAS No. | : | 32175-00-1 |
| Company | : | Paushak Limited At: Panelav, PO:Tajpura, Taluka: Halol District: Panchmahals - 389350 Gujarat, INDIA. |
| Telephone | : | +91 2676 664403 / 664412 |
| Emergency Phone # | : | +91 9909985374 |

2. HAZARDS IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Acute Toxicity - Oral [Category 3]
Acute Toxicity - Inhalation [Category 3]
Skin Corrosion/Irritation [Category 2]
Eye Damage/Irritation [Category 2A]
Sensitization - Respiratory [Category 1]
Sensitization - Skin [Category 1]
Specific Target Organ Toxicity (Single Exposure) [Category 3]
Flammable Liquids [Category 4]
Danger!

Signal word:

Hazard Statement(s):

H227: Combustible liquid.
H301+H331: Toxic by inhalation and if swallowed
H315: Causes skin irritation
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

P210: Keep away from flames and hot surfaces. – No smoking.
P261: Avoid breathing mist, vapors or spray.
P264: Wash hands and face thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing must not be allowed out of the workplace.
P280: Wear protective gloves, eye protection.
P284: Wear respiratory protection.
P301+P310+P330: If swallowed: Immediately call a poison center or doctor. Rinse mouth.
P302+P352+P333+P313+P363: If on skin; Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse.
P304+P340+P311: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor.
P305+P351+P338+P337+P313: If in eyes; 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 or

Product Name: trans-4-Methylcyclohexyl Isocyanate

Revision Date: 16.01.2024

Revision No: 02

Material Safety Data Sheet

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| | attention. |
| Hazards not otherwise classified: | <p>P370+P378: In case of fire: Use dry chemical, dry sand or foam to extinguish.</p> <p>P403+P233: Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405: Store locked up.</p> <p>P501: 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.).</p> <p>May cause polymerization.</p> |
| 3. COMPOSITION/INFORMATION ON INGREDIENTS | |
| Substance/Mixture: | Substance |
| Components: | trans-4-Methylcyclohexyl Isocyanate |
| Percent: | >98.0%(GC) |
| CAS Number: | 32175-00-1 |
| EC Number: | |
| Molecular Weight: | 139.20 |
| Chemical Formula: | C ₈ H ₁₃ NO |
| Synonyms: | Isocyanic Acid trans-4-Methylcyclohexyl Ester |
| CA Index: | No data available |
| 4. FIRST AID MEASURES | |
| Inhalation: | May cause coughing, difficult breathing and nausea. Immediately call a poison center or doctor. Effects of exposure (inhalation) to substance may be delayed. Inhalation of vapors or contact with substance will result in contamination and potential harmful effects. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. |
| Skin contact: | Immediately call a poison center or doctor. Effects of exposure (skin contact) to substance may be delayed. Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. |
| Eye contact: | IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. |
| Ingestion: | Toxic if swallowed. Do not induce vomiting without medical advice. Effects of exposure (ingestion) to substance may be delayed. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth methods if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not re enter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. |

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| Symptoms/effects: | |
| Acute: | Redness. |
| Delayed: | May cause skin sensitization. May have effects on the respiratory tract. |
| Immediate medical attention: | WARNING: It might be dangerous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is toxic. CAUTION: Victim may be a source of contamination. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. |
| 5. FIRE-FIGHTING MEASURES | |
| Suitable extinguishing media: | Dry chemical, CO2 or water spray. Consult with local fire authorities before attempting large scale fire fighting operations. |
| Unsuitable extinguishing media for safety reasons: | No data available |
| Special hazards arising from the substance or mixture: | |
| Hazardous combustion products: | These products include: Carbon oxides Nitrogen oxides |
| Other specific hazards: | Closed containers may explode from heat of a fire. |
| Special precautions for fire-fighters: | Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. Do not use straight streams. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Move containers from fire area if you can do it without risk. |
| Special protective equipment for fire-fighters: | Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection. |
| 6. ACCIDENTAL RELEASE MEASURES | |
| Personal precautions: | Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use spark proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. |
| Personal protective equipment: | Wear eye protection (splash goggles) and face protection (full length face shield). Wear protective clothing (chemical resistant suit and chemical resistant boots). Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile). |
| Emergency procedures: | Isolate area until gas has dispersed. Do not clean-up or dispose except under supervision of a specialist. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and exercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed. |
| Methods and materials for containment and cleaning up: | ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded. Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. |
| Environmental precautions: | Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause |

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| environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed. | |
| Prevention of secondary hazards: | No data available |
| 7. HANDLING AND STORAGE | |
| Precautions for safe handling: | Do NOT breath gas, fumes, vapor, or spray. Do not ingest. Avoid contact with skin and eyes. Keep away from heat and sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic charge. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition. |
| Conditions for safe storage: | Store locked up. Keep containers tightly closed in ambient temperature, well-ventilated place. Keep away from sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition source. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store under inert gas (e.g. Argon). Moisture sensitive. |
| Storage incompatibilities: | Combustible substances, Store away from oxidizing agents. |
| 8. EXPOSURE CONTROLS/PERSONAL PROTECTION | |
| Exposure limits: | No data available |
| Appropriate engineering controls: | Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical. |
| Personal protective equipment | |
| Respiratory protection: | Vapor respirator. Be sure to use a approved respirator or equivalent. |
| Hand protection: | Wear protective gloves. |
| Eye protection: | Splash goggles. |
| Skin and body protection: | Lab coat. |
| Control of environmental exposure: | No data available |
| 9. PHYSICAL AND CHEMICAL PROPERTIES | |
| Physical state (20°C): | Liquid |
| Form: | Clear |
| Color: | Colorless - Almost colorless |
| Odor: | No data available |
| Odor threshold: | No data available |
| Melting point/freezing point: | No data available |
| Boiling point/range: | 65°C (149°F)/0.8kPa |
| Decomposition temperature: | No data available |
| Density: | No data available |
| Relative density: | 0.95 |
| Partition coefficient: n-octanol/water (log Pow) | No data available |

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| Flash point: | 48°C |
| Flammability (solid, gas): | No data available |
| pH: | No data available |
| Vapor pressure: | No data available |
| Vapor density: | No data available |
| Dynamic Viscosity: | No data available |
| Evaporation rate: | No data available |
| (Butyl Acetate = 1) | |
| Autoignition temperature: | No data available |
| Flammability or explosive limits: | |
| Lower: | No data available |
| Upper: | No data available |
| Solubility(ies): | No data available |
| Viscosity, kinematic: | No data available |
| 10. STABILITY AND REACTIVITY | |
| Reactivity: | No data available |
| Chemical Stability: | Stable under recommended storage conditions. (See Section 7) |
| Possibility of Hazardous Reactions: | In use, may form flammable/explosive vapor-air mixture. |
| Conditions to avoid: | Avoid excessive heat and light. |
| Incompatible materials: | Oxidizing agents |
| Hazardous Decomposition Products: | No data available |
| 11. TOXICOLOGICAL INFORMATION | |
| Acute Toxicity: | |
| Oral Toxicity LD50(rat): | : [Ideal range : >50 & <= 300 mg/kg] |
| Dermal Toxicity LD50(Rabbit): | : [Ideal range : >200 & <= 1000 mg/kg] |
| Inhalation Toxicity LC50 (rat) : | [Ideal range : >2 & <= 4 mg/L] |
| Skin corrosion/irritation: | |
| Serious eye damage/irritation: | No data available |
| Chronic Toxicity/Effects: | No data available |
| Respiratory or skin sensitization: | No data available |
| Germ cell mutagenicity: | No data available |
| Carcinogenicity: | No data available |
| Reproductive toxicity: | No data available |
| IARC: | No data available |
| NTP: | No data available |
| OSHA: | No data available |
| Routes of Exposure: | Inhalation, Eye contact, Ingestion, Skin contact. |
| Symptoms related to exposure: | Overexposure may result in serious illness or death. Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally blistering. Skin contact may result in redness, pain or dry skin. Eye contact may result in redness or pain. Inhalation causes irritation of the lungs and respiratory system. Skin contact may result in sensitization. Readily absorbed through skin. |
| Potential Health Effects: | Skin and eye contact may result in irritation. Inhalation causes irritation of the lungs and respiratory system. |
| Target organ(s): | May cause respiratory irritation. |
| 12. ECOLOGICAL INFORMATION | |
| Ecotoxicity | |
| Fish: | No data available |
| Aquatic invertebrates: | No data available |

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| Aquatic plants: | No data available |
| Chronic toxicity to fish: | No data available |
| Chronic toxicity to aquatic invertebrates: | No data available |
| Crustacea: | No data available |
| Algae: | No data available |
| Persistence and degradability: | No data available |
| Bioaccumulative potential (BCF): | No data available |
| Mobility in soil: | No data available |

13. DISPOSAL CONSIDERATIONS

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| 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. 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. |
| Waste treatment methods | No data available |

14. TRANSPORT INFORMATION

DOT (US)

| UN number: | Proper Shipping Name: | Class or Division: | Subrisk(s): | Packing Group: |
|------------|--|--------------------|-------------|----------------|
| UN2206 | Isocyanates, toxic, n.o .s. (TRANS-4-METHYL CLCLOHEXYL ISOCYNATE) | 6.1 | -- | III |

IATA

| UN number: | Proper Shipping Name: | Class or Division: | Subrisk(s): | Packing Group: |
|------------|----------------------------|--------------------|-------------|----------------|
| UN2206 | Isocyanates, toxic, n.o.s. | 6.1 | -- | III |

IMDG

| UN number: | Proper Shipping Name: | Class or Division: | Subrisk(s): | Packing Group: |
|------------|----------------------------|--------------------|-------------|----------------|
| UN2206 | Isocyanates, toxic, n.o.s. | 6.1 | -- | III |

EmS number: F-A, S-A

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.

Chemical safety assessment : For this product a chemical safety assessment was not carried out.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

Product Name: trans-4-Methylcyclohexyl Isocyanate

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| SARA 313: | Not Listed | | |
| SARA 302: | Not Listed | | |
| State Regulations | | | |
| Massachusetts | Not Listed | | |
| New Jersey | Not Listed | | |
| Pennsylvania | Not Listed | | |
| California Proposition 65: | Not Listed | | |
| Other Information | | | |
| NFPA Rating: | | HMIS Classification: | |
| Health: | 0 | Health: | 0 |
| Flammability: | 0 | Flammability: | 0 |
| Instability: | 0 | Instability: | 0 |
| International Inventories | | | |
| WHMIS hazard class: | B3: Combustible Liquid. D1B: Materials causing immediate and serious toxic effects. (Toxic) D2B: Materials causing other toxic effects. (Toxic) | | |
| 16. OTHER INFORMATION | | | |
| The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide for technically qualified personnel. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Paushak Ltd. extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any third party use & shall not be held liable for any damage resulting from handling or from contact with the above product. | | | |