

# Paushak Limited

## Safety Data Sheet

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

|                   |   |   |
|-------------------|---|---|
| Product name      | : | Cyclohexyl Isocyanate   |
| CAS No.           | : | 3173-53-3   |
| Company           | : | Paushak Limited<br>At: Panelav, PO:Tajpura, Taluka: Halol<br>Distirict: Panchmahals - 389350<br>Gujarat, INDIA. |
| Telephone         | : | +91 2676 664403 / 664412  |
| Emergency Phone # | : | +91 9909985374  |

### 2. HAZARDS IDENTIFICATION

|                               |  |
|-------------------------------|--|
| <b>Classification</b>         | Flammable liquids (Category 3)<br>Acute oral toxicity (Category 4)<br>Acute dermal toxicity (Category 4)<br>Acute Inhalation Toxicity - Vapors (Category 1)<br>Skin Corrosion/irritation (Category 1 B)<br>Serious Eye Damage/Eye Irritation (Category 1)<br>Respiratory Sensitization (Category 1)<br>Skin Sensitization (Category 1)   |
| <b>Environmental Hazards:</b> | Not classified   |
| <b>Signal word:</b>           | Danger   |
| <b>Hazard Statement(s):</b>   | <b>H226:</b> Flammable liquid and vapour.<br><b>H302+H312:</b> Harmful if swallowed or in contact with skin.<br><b>H314:</b> Causes severe skin burns and eye damage.<br><b>H315:</b> Causes skin irritation.<br><b>H317:</b> May cause an allergic skin reaction.<br><b>H319:</b> Causes serious eye irritation.<br><b>H330:</b> Fatal if inhaled.<br><b>H334:</b> May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br><b>H335:</b> May cause respiratory irritation. |

#### Pictogram(s) or Symbol(s):



#### Precautionary Statement(s):

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| <b>P210:</b> Keep away from heat, sparks, open flames and hot surfaces. – No smoking. |
| <b>P233:</b> Keep container tightly closed.   |
| <b>P240:</b> Ground and bond container and receiving equipment.                       |
| <b>P241:</b> Use explosion-proof electrical, ventilating and lighting equipment.      |
| <b>P242:</b> Use only non-sparking tools.   |
| <b>P243:</b> Take action to prevent static discharges.                                |
| <b>P260:</b> Do not breathe fume/vapours.   |
| <b>P264:</b> Wash hands and face thoroughly after handling.                           |
| <b>P270:</b> Do not eat, drink or smoke when using this product.                      |
| <b>P271:</b> Use only outdoors or in a well-ventilated area.                          |
| <b>P272:</b> Contaminated work clothing must not be allowed out of the workplace.     |
| <b>P280:</b> Wear protective gloves, protective clothing, eye protection.             |
| <b>P284:</b> Wear respiratory protection.   |
| <b>P301+P312:</b> IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.    |
| <b>P330:</b> Rinse mouth.   |

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|   | <p><b>P302+P352:</b> IF ON SKIN, Wash with plenty of water and soap.</p> <p><b>P362+P364:</b> Take off contaminated clothing and wash it before reuse.</p> <p><b>P304+P340:</b> IF INHALED; Remove person to fresh air and keep comfortable for breathing.</p> <p><b>P310:</b> Immediately call a poison center or doctor.</p> <p><b>P305+P351+P338:</b> IF IN EYES; Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p><b>P337+P313:</b> If eye irritation persists: Get medical advice or attention.</p> <p><b>P370+P378:</b> In case of fire; Use dry chemical, dry sand or foam to extinguish.</p> <p><b>P403+P233:</b> Store in a well-ventilated place. Keep container tightly closed.</p> <p><b>P405:</b> Store locked up.</p> <p><b>P501:</b> Dispose of contents and container in accordance with local, regional, national regulations.</p> |
| <b>Hazards not otherwise classified:</b>                            | May cause polymerization.  |
| <b>3. COMPOSITION/INFORMATION ON INGREDIENTS</b>                    |  |
| <b>Substance/Mixture:</b>   | Substance  |
| <b>Components:</b>  | Cyclohexyl Isocyanate  |
| <b>Percent:</b>   | >98.0%(GC)   |
| <b>CAS Number:</b>  | 3173-53-3  |
| <b>EC Number:</b>   | 221-639-3  |
| <b>Molecular Weight:</b>  |  |
| <b>Chemical Formula:</b>  | C <sub>7</sub> H <sub>11</sub> NO  |
| <b>Synonyms:</b>  |  |
| <b>CA Index:</b>  | No data available  |
| <b>4. FIRST AID MEASURES</b>  |  |
| <b>Inhalation:</b>  | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.   |
| <b>Skin contact:</b>  | Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.   |
| <b>Eye contact:</b>   | 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.   |
| <b>Ingestion:</b>   | Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.  |
| <b>Most important symptoms and effects, both acute and delayed:</b> | Burning sensation, Cough, Headache, Shortness of breath, Laboured breathing, Sore throat, Redness, Pain, Blurred Vision, Burn  |
| <b>Immediate medical attention:</b>                                 | Medical observation is indicated. Depending on the degree of exposure, periodic medical examination is indicated.  |
| <b>Protection of first-aiders:</b>                                  | A rescuer should wear personal protective equipment, such as rubber gloves and airtight goggles.   |
| <b>5. FIRE-FIGHTING MEASURES</b>                                    |  |
| <b>Suitable extinguishing media:</b>                                | Dry chemical, foam, carbon dioxide.  |
| <b>Unsuitable extinguishing media for safety reasons:</b>           | Water (It may scatter and spread fire.)  |
| <b>Special hazards arising from the substance or mixture:</b>       | This substance may polymerize explosively when heated or involved in a fire. Container may explode when heated. Combat fire from a sheltered position. Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.   |
| <b>Other specific hazards:</b>                                      | No data available  |
| <b>Special precautions for fire-fighters:</b>                       | Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so.  |

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| <b>Special protective equipment for fire-fighters:</b>                                 | When extinguishing fire, be sure to wear personal protective equipment.  |
| <b>6. ACCIDENTAL RELEASE MEASURES</b>  |  |
| <b>Personal precautions, Personal protective equipment &amp; Emergency procedures:</b> | 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.  |
| <b>Methods and materials for containment and cleaning up:</b>                          | Absorb spilled material in dry sand or inert absorbent before recovering it into a covered 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.  |
| <b>Environmental precautions:</b>  | Prevent product from entering drains.  |
| <b>Prevention of secondary hazards:</b>  | Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.  |
| <b>7. HANDLING AND STORAGE</b>   |  |
| <b>Precautions for safe handling:</b>  |  |
| <b>Technical measures:</b>   | 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 surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling.<br>Use a closed system if possible. Use ventilation, local exhaust if vapour or aerosol will be generated. |
| <b>Advice on safe handling:</b>  | Avoid contact with skin, eyes and clothing.  |
| <b>Conditions for safe storage, including any incompatibilities:</b>                   | Keep container tightly closed. Store at ambient temperature.<br>Store under inert gas.<br>Protect from moisture.<br>Store locked up.<br>Store away from incompatible materials such as oxidizing agents.<br>Heat-sensitive, Moisture-sensitive   |
| <b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>  |  |
| <b>Exposure limits:</b>  | No data available  |
| <b>Exposure controls</b>   | No data available  |
| <b>Appropriate engineering controls:</b>   | Install a closed system or local exhaust. Also install safety shower and eye bath.   |
| <b>Personal protective equipment</b>   |  |
| <b>Respiratory protection:</b>   | Half or full face piece respirator, self-contained breathing apparatus (SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.  |
| <b>Hand protection:</b>  | Impervious gloves.   |
| <b>Eye protection:</b>   | Safety goggles. A face-shield, if the situation requires.  |
| <b>Skin and body protection:</b>   | Impervious protective clothing. Protective boots, if the situation requires.   |
| <b>Control of environmental exposure:</b>  | Do not let product enter drains.   |
| <b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>   |  |
| <b>Physical state (20°C):</b>  | Liquid   |
| <b>Form:</b>   | Clear- Slightly cloudy   |
| <b>Color:</b>  | Colorless - Slightly pale yellow   |
| <b>Odor:</b>   | Pungent  |
| <b>Odor threshold:</b>   | No data available  |
| <b>Melting point/freezing point:</b>   | -80 °C / -112 °F   |

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| <b>Boiling point/range:</b>                             | 175°C  |
| <b>Decomposition temperature:</b>                       | No data available  |
| <b>Density:</b>   | No data available  |
| <b>Relative density:</b>                                | 0.99   |
| <b>Partition coefficient: n-octanol/water (log Pow)</b> | No data available  |
| <b>Flash point:</b>                                     | 48°C   |
| <b>Flammability (solid, gas):</b>                       | No data available  |
| <b>pH:</b>  | No data available  |
| <b>Vapor pressure:</b>                                  | 0.27kPa/25°C   |
| <b>Vapor density:</b>                                   | 4.3  |
| <b>Dynamic Viscosity:</b>                               | No data available  |
| <b>Evaporation rate: (Butyl Acetate = 1)</b>            | No data available  |
| <b>Autoignition temperature:</b>                        | 420°C  |
| <b>Flammability or explosive limits:</b>                |  |
| <b>Lower:</b>   | No data available  |
| <b>Upper:</b>   | No data available  |
| <b>Solubility(ies):</b>                                 | No data available  |
| <b>Viscosity, kinematic:</b>                            | No data available  |
| <b>10. STABILITY AND REACTIVITY</b>                     |  |
| <b>Reactivity:</b>                                      | No data available  |
| <b>Chemical Stability:</b>                              | Polymerization may occur under the influences of heat, light or on contact with polymerization initiators such as peroxides etc. |
| <b>Possibility of Hazardous Reactions:</b>              | No special reactivity has been reported.   |
| <b>Conditions to avoid:</b>                             | Heat, Spark, Open flame, Static discharge, Light   |
| <b>Incompatible materials:</b>                          | Oxidizing agents, Acids, Strong bases, Water, Alcohols, Amines   |
| <b>Hazardous Decomposition Products:</b>                | Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx), Hydrogen cyanide.  |
| <b>11. TOXICOLOGICAL INFORMATION</b>                    |  |
| <b>Acute Toxicity:</b>                                  | ipr-mus LD50:13 mg/kg<br>ivn-mus LD50:18 mg/kg   |
| <b>Skin corrosion/irritation:</b>                       | No data available  |
| <b>Serious eye damage/irritation:</b>                   | No data available  |
| <b>Chronic Toxicity/Effects:</b>                        | No data available  |
| <b>Respiratory or skin sensitization:</b>               | No data available  |
| <b>Germ cell mutagenicity:</b>                          | mmo-sat 150 ug/plate (+S9)   |
| <b>Carcinogenicity:</b>                                 | No data available  |
| <b>Reproductive toxicity:</b>                           | RTECS Number: NQ8650000  |
| <b>IARC:</b>  | No data available  |
| <b>NTP:</b>   | No data available  |
| <b>OSHA:</b>  | No data available  |
| <b>Routes of Exposure:</b>                              | No data available  |
| <b>Symptoms related to exposure:</b>                    | No data available  |
| <b>Potential Health Effects:</b>                        | No data available  |
| <b>Target organ(s):</b>                                 | Respiratory tract irritation   |
| <b>12. ECOLOGICAL INFORMATION</b>                       |  |
| <b>Ecotoxicity</b>                                      |  |
| <b>Fish:</b>  | No data available  |
| <b>Aquatic invertebrates:</b>                           | No data available  |

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| <b>Aquatic plants:</b>   | No data available   |                           |                             |                       |
| <b>Chronic toxicity to fish:</b>   | No data available   |                           |                             |                       |
| <b>Chronic toxicity to aquatic invertebrates:</b>  | No data available   |                           |                             |                       |
| <b>Crustacea:</b>  | No data available   |                           |                             |                       |
| <b>Algae:</b>  | No data available   |                           |                             |                       |
| <b>Persistence and degradability:</b>  | No data available   |                           |                             |                       |
| <b>Bioaccumulative potential (BCF):</b>  | No data available   |                           |                             |                       |
| <b>Mobility in soil:</b>   | No data available   |                           |                             |                       |
| <b>Results of PBT and vPvB assessment:</b>   | No data available   |                           |                             |                       |
| <b>13. DISPOSAL CONSIDERATIONS</b>   |   |                           |                             |                       |
| <b>Disposal of product:</b>  | Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance. |                           |                             |                       |
| <b>Disposal of container:</b>  | Dispose of as unused product.   |                           |                             |                       |
| <b>Other considerations:</b>   | No data available   |                           |                             |                       |
| <b>Waste treatment methods</b>   | No data available   |                           |                             |                       |
| <b>14. TRANSPORT INFORMATION</b>   |   |                           |                             |                       |
| <b>DOT (US)</b>  |   |                           |                             |                       |
| <b>UN number:</b>  | <b>Proper Shipping Name:</b>  | <b>Class or Division:</b> | <b>Subrisk(s):</b>          | <b>Packing Group:</b> |
| UN 2488  | Cyclohexyl Isocyanate   | 6.1                       | 3                           | I                     |
| <b>IATA</b>  |   |                           |                             |                       |
| <b>UN number:</b>  | <b>Proper Shipping Name:</b>  | <b>Class or Division:</b> | <b>Subrisk(s):</b>          | <b>Packing Group:</b> |
| UN 2488  | Cyclohexyl Isocyanate   | 6.1                       | 3                           | I                     |
| <b>IMDG</b>  |   |                           |                             |                       |
| <b>UN number:</b>  | <b>Proper Shipping Name:</b>  | <b>Class or Division:</b> | <b>Subrisk(s):</b>          | <b>Packing Group:</b> |
| UN 2488  | Cyclohexyl Isocyanate   | 6.1                       | 3                           | I                     |
| <b>EmS number:</b>   | F-E, S-D  |                           |                             |                       |
| <b>15. REGULATORY INFORMATION</b>  |   |                           |                             |                       |
| <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>  |   |                           |                             |                       |
| This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.                 |   |                           |                             |                       |
| <b>Chemical safety assessment :</b> For this product a chemical safety assessment was not carried out. |   |                           |                             |                       |
| <b>US Federal Regulations</b>  |   |                           |                             |                       |
| <b>CERCLA Hazardous substance and Reportable Quantity:</b>   |   |                           |                             |                       |
| <b>SARA 313:</b>   | Not Listed  |                           |                             |                       |
| <b>SARA 302:</b>   | Not Listed  |                           |                             |                       |
| <b>State Regulations</b>   |   |                           |                             |                       |
| <b>Massachusetts</b>   | Not Listed  |                           |                             |                       |
| <b>New Jersey</b>  | Not Listed  |                           |                             |                       |
| <b>Pennsylvania</b>  | Not Listed  |                           |                             |                       |
| <b>California Proposition 65:</b>  | Not Listed  |                           |                             |                       |
| <b>Other Information</b>   |   |                           |                             |                       |
| <b>NFPA Rating:</b>  |   |                           | <b>HMIS Classification:</b> |                       |
| <b>Health:</b>   | 4   |                           | <b>Health:</b>              | 4                     |
| <b>Flammability:</b>   | 2   |                           | <b>Flammability:</b>        | 2                     |
| <b>Instability:</b>  | 0   |                           | <b>Instability:</b>         | 0                     |

**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. See reverse side of invoice or packing slip for additional terms and conditions of sale.