SAFETY DATA SHEET

| Section 1 | Chemical Product and Company Information | Page E1 of E2 |
|---|--|--|
| | 80 Northwest Blvd. Nashua, NH 03063 (800) 225-3739 | CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use. |
| Product | UREA | |
| Synonyms | Carbamide Resin | |
| Section 2 | Hazards Identification | |
| to the Globa Chemicals. Signal word Pictograms Target orga GHS Classi GHS Label | Ince or mixture has not been classified as hazardous according ally Harmonized System (GHS) of Classification and Labeling of I: Not classified I: Not classified Ins: Blood, Cardiovascular system fication: Not classified information: Hazard statement: Not classified ary statement: Not classified Information: Not classified Information: Hazard statement: Not classified Information: | Supplementary information: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell. |

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

| Section 3 | Composition / Information on Ingredients | | | | | |
|---------------|--|---------|------|-----------|--|--|
| Chemical Name | | CAS # | % | EINECS | | |
| Urea | | 57-13-6 | 100% | 200-315-5 | | |
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| Section 4 | First Aid Measures | 1 | 1 | | | |
| 00000014 | r inst Alu measures | | | | | |

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

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Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

| Section 8 | Exposure Controls / Personal Protection | | | | |
|------------------|---|-----------------|-----------------|-----------------|--|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | |
| Exposure Limits. | Urea | Not established | Not established | Not established | |

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

| approved respirator. | | | | | | | |
|---|---|---|------------------|---|-------------------|-----------------------------|--|
| Section 9 Physical & Chemical P | roperties | | | | | | |
| Appearance: Solid, white crystals. Odor: Ammonia-like odor. Odor threshold: Data not available. pH: Data not available. Melting / Freezing point: 132°C (270°F) Boiling point: Decomposes Flash point: Not flammable | Flammability (sol Explosion limits: Vapor pressure (r Vapor density (Ai Relative density (| Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 1.2105 @ 25°C Vapor density (Air = 1): 2.07 Relative density (Specific gravity): 1.335 Solubility(ies): Soluble in water. | | Partition coefficient: (n-octanol / water): Log Pow: -3.0/-1. Auto-ignition temperature: Data not available Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: NH ₂ CONH ₂ Molecular weight: 60.06 | | | |
| Section 10 Stability & Reactivity | | | | | | | |
| Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Excessive temperatures, and moisture. | | | | | | | |
| pentachloride. | Incompatible materials: Strong oxidizing agents, sodium hypochlorite, sodium nitrate, calcium hypochlorite, nitrosyl perchlorate, gallium perchlorate, diphosphorus pentachloride. Hazardous decomposition products: Oxides of carbon, ammonia, cyanuric acid, oxides of nitrogen. | | | | | | |
| | | | or malogen. | | | | |
| Section 11 Toxicological Informat Acute toxicity: Oral-rat LD50: 8471 mg/kg ; Del | | | | | | | |
| Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available StoT-repeated exposure: Data not available Potential health effects: Inhalation: Inhalation may cause cough, shortness of breath, sore throat. Ingestion: Ingestion causes convulsions, headache, nausea, vomiting. Skin: Contact with skin causes irritation. Signs and symptoms of exposure: Exercise appropriate procedures to minimize potential hazards. | | | | | | | |
| Section 12 Ecological Information | | | | | | | |
| Toxicity to fish: Rasbora heteromorpha (Fish, marine) LC50: 12,000 mg/L/96 hours Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea), EC50 = >10,000 mg/l/24 hours Toxicity to algae: No data available Persistence and degradability: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. | | | | | | | |
| Section 13 Disposal Consideratio | | | ply Endered read | lations may a | upply to empty as | atainer. State and/or least | |
| These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency. Section 14 Transport Information (US DOT / CANADA TDG) | | | | | | | |
| • | • | • | | | | | |
| UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No Exceptions: Not applicable 2012 ERG Guide # Not applicable Reportable Quantity: No Marine pollutant: No | | | | | | | |
| Section 15 Regulatory Information | | | | | | | |
| A chemical is considered to be listed if the CAS number | | | | Dei | NDO | | |
| Component | TSCA | CERLCA (RQ) | RCRA code | DSL | NDSL | WHMIS Classification | |
| Urea | Listed | Not listed | Not listed | Listed | Not listed | Uncontrolled product | |

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.