

Safety Data Sheet

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| Section 1 Identification | <p>(a) Product: Tara UAN (32-0-0)</p> <p>(b) Other means of identification: Urea Ammonium Nitrate Solution</p> <p>(c) Recommended use of the chemical and restrictions on use; Fertility</p> <p>(d) Supplier's details (including name, address, phone number etc.): Tara Solutions, LLC P.O. Box 13452, Tampa, FL 33681. Office: 813-563-1463.</p> <p>(e) Emergency phone number: CHEMTREC 1-800-424-9300</p> |
| Section 2 Hazard Identification | <p>(a) GHS classification of the substance/mixture and any national or regional information: GHS07</p> <p>(b) GHS label elements, including precautionary statements: Warning: May cause eye irritation, Harmful if swallowed, May cause respiratory irritation.</p> <p>(c) Other hazards which do not result in classification (e.g. "dust explosion hazard") or are not covered by the GHS: NA</p> |
| Section 3 Product Composition | <p>(a) Chemical identity: Urea Ammonium Nitrate Solution</p> <p>(b) Common name, synonyms, etc.: Urea, Ammonium Nitrate</p> <p>(c) CAS number and other unique identifiers; 57-13-6, 6484-52-2</p> <p>(d) Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance. NA</p> <p>(e) Chemical identity and concentration: Urea 30-36%, Ammonium Nitrate 40-60%</p> |
| Section 4 First-Aid Measures | <p>(a) Eyes: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Call poison control center or doctor for treatment advice.</p> <p>(b) Skin: Immediately flush skin with water while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse.</p> <p>(c) Ingestion: If ingested consult a physician immediately. Do not induce vomiting.</p> <p>(d) Inhalation: Use in well ventilated area, however if symptomatic, remove to fresh air.</p> <p>(e) Most important symptoms/effects, acute and delayed: High levels of nitrates may reduce the blood's ability to transport oxygen causing headache, fatigue, dizziness and blue lips and skin (methemoglobinemia). Moderate irritant of eyes, skin, mucous membranes, and contaminated tissue. Prolonged contact can result in tissue damage which could lead to blindness. Ingestion can be harmful or fatal.</p> <p>(f) Chronic health hazards: Methemoglobinemia is the primary health effect. Prolonged skin contact may result in dermatitis (inflammation and redness of skin). Repeated ingestion of small amounts may cause weakness, headaches, neurological effects and mental impairment. Possible excessive action of the kidneys and perhaps the bowels can occur.</p> |
| Section 5 Fire-fighting Measures | <p>(a) Suitable (and unsuitable) extinguishing media: Not combustible or reactive. Fire extinguisher/other.</p> <p>(b) Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products): In a fire this material may decompose and produce carbon oxides, oxides of nitrogen and ammonia.</p> <p>(c) Special protective equipment and precautions for fire-fighters. Assure self-contained breathing apparatus is worn. Fight fire from upwind. Prevent runoff if possible.</p> <p>(d) SFPA Rating: Health - 1 (slight), Fire - 0 (least), Reactivity - 0 (least)</p> <p>(e) Other: Do not allow runoff from fire fighting to enter drains or water courses.</p> |
| Section 6 Accidental Release Measures | <p>(a) Personal precautions, protective equipment and emergency procedures: Avoid splashing. Prevent exposure to spilled material with the use of proper PPE. Refer to Section 7, Safe Handling and Storage for additional precautionary measures. Keep upwind of spill. Spilled material may cause a slipping hazard. Ventilate area around leak or spill. Use appropriate personal protective equipment. For additional information, refer to Section 8, Exposure Controls/Personal Protection.</p> <p>(b) Environmental precautions. Avoid release to the environment. Control the flow of product using dikes of soil, sand bags, or other commercially available inert absorbent socks or boom.</p> <p>(c) Methods and materials for containment and cleaning up: Control the flow of product using dikes of soil, sand bags, or other commercially available inert absorbent socks or boom. Avoid splashing or spraying. Prevent discharge to sewers or waterways. Stop the flow of material, if this is without risk. Collect and dispose of spillage as indicated in Section 13.</p> |
| Section 7 Handling & Storage | <p>(a) Precautions for safe handling. None required. Goggles and gloves recommended.</p> <p>(b) Conditions for safe storage, including any incompatibilities: Store in a well-ventilated, cool, dry place. Do not allow product to evaporate to dryness. When the water in UAN evaporates, the residue may include solid ammonium nitrate and urea. When sensitized or during decomposition, solid ammonium nitrate may become unstable or explosive. UAN pumps operated with blocked discharge have been known to detonate. Smothering, contact with organic material, or combustible material may cause an explosion. Thoroughly wash out pipes, tanks, or valves before welding or burning. Residual solidified ammonium nitrate may explode under high temperatures and confinement. Heating above 140°F will promote hydrolysis. Extreme cold (< 32°F) may cause crystallization of the product. Do not allow liquid to evaporate, as solid ammonium nitrate residue can form.</p> <p>(c) Incompatibility: Flammable and combustible materials, strong reducing agents and strong acids, finely powdered metals.</p> |

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| Section 8 Exposure Controls & Personal Protection | <p>(a) Control parameters e.g. occupational exposure limit values or biological limit values: None established for Ammonium Nitrate and Urea.</p> <p>(b) Appropriate engineering controls: Local or general exhaust. Eyewash and emergency shower facilities should be available.</p> <p>(c) Individual protection measures, such as personal protective equipment. Eyes - Use chemical or safety goggles. Skin - Use protective clothing. Hand Protection - Use gloves chemically resistant to this material. Respiratory - None required under normal conditions. NIOSH approved respirator if there is a mist of the product.</p> |
| Section 9 Physical & Chemical Properties | <p>(a) Appearance (physical state, colour etc): Colorless liquid.</p> <p>(b) Odour: Slight ammonia odor.</p> <p>(c) Odour threshold; NA</p> <p>(d) pH: 6.3-7.2</p> <p>(e) Melting point/freezing point: No data available.</p> <p>(f) Boiling point: >212F</p> <p>(g) Flash point: Not flammable</p> <p>(h) Evaporation rate: No data available</p> <p>(i) Flammability (solid, gas): No data available.</p> <p>(j) Relative density: 1.326 @ 60F</p> <p>(k) Solubility(ies): Miscible in water</p> <p>(l) Salt-out temperature: 32F</p> <p>(m) UEL/LEL: No data available.</p> <p>(n) Solubility: Miscible in water</p> <p>(o) Auto-ignition temperature: Not flammable</p> |
| Section 10 Stability & Reactivity | <p>(a) Reactivity: Product is not reactive under normal conditions. Avoid interaction with heat (flames), oxidizers, acids or alkalis.</p> <p>(b) Chemical stability: Product is stable under normal conditions</p> <p>(c) Possibility of hazardous reactions: None known</p> <p>(d) Conditions to avoid: Do not allow product to evaporate to dryness. Avoid extreme or elevated temperatures and direct heat.</p> <p>(e) Incompatible materials: Avoid contact with readily oxidizable materials, strong acids, strong reducing agents, alkalis and finely powdered metals.</p> <p>(f) Hazardous decomposition products: Extreme heat may cause decomposing to carbon oxides. If product evaporates to dryness, residual solid (Ammonium) can be explosive.</p> |
| Section 11 Toxicological Information | <p>(a) Routes of Exposure (inhalation, ingestion, skin and eye contact): Mild skin and eye irritant. May irritate respiratory tract and mucous membranes. Can cause abdominal pain, vomiting, diarrhea and methemoglobinemia.</p> <p>(b) Long Term Effects: Methemoglobinemia is the primary long-term health effect of over-exposure.</p> <p>(c) Toxicity: No limits have been set for this material.</p> <p>(d) Acute Toxicity: Very low toxicity to humans.</p> <p>(e) Irritation and Corrosion: Non irritating to the skin. Irritating to the eyes.</p> <p>(f) Sensitation: Non-sensitizer to skin. Respiratory sensitization not available.</p> <p>(f) Reproductive Toxicity: No known significant effect or critical hazards.</p> <p>(g) Specific Target Organ Toxicity (Single or Repeat Exposure): No Data Available.</p> <p>(h) Exposure Symptoms: Eyes - Irritation and watering, Skin & respiratory - No data Available, Ingestion - Over exposure is unlikely under normal working conditions.</p> <p>(i) Potential Chronic Health Effects: Carcinogenicity - Potential for Nitrosamine formation if ingested. No other significant effects or critical hazards.</p> <p>(j) Carcinogen: The International Agency for Research on Cancer has not classified Urea Ammonium Nitrate for its carcinogenic potential.</p> |
| Section 12 Ecological Information | <p>(a) Water: High concentrations may be harmful to fish and other aquatic organisms. There is no data available for this product.</p> <p>(b) Ecotoxicity: Acute and chronic results for algae, daphnia, crustaceans, and fingerlings.</p> <p>(c) Persistence and Degradability: Readily biodegradable.</p> <p>(d) Bioaccumulative Potential: No Data Available.</p> <p>(e) Mobility in Soil: No data Available.</p> <p>(f) Other Adverse Effects: May be harmful to the environment if released in large quantities, Excessive nutrient runoff to a body of water may result in eutrophication.</p> |
| Section 13 Disposal Considerations | <p>(a) Waste: Disposal must be done in accordance with local, state, and federal environmental regulations. Place waste in an appropriate container with correct labeling.</p> |
| Section 14 Transport Information | <p>This material is not regulated as dangerous goods by the US Department of Transportation.</p> |

**Section 15
Regulatory
Information**

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act (SARA) and is considered, under applicable definitions, to meet the following categories: Fire - No, Pressure - No, Acute - No, Chronic - No, Reactive - No

This product contains the following substances subject to the reporting requirements of Title III (EPCRA) of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: Ammonium Nitrate (CAS No. 6484-52-2) and Urea (CAS No. 57-13-6)

All components of this product are listed in the USEPA Toxic Substance Control Act Inventory.

**Section 16
Other
Information**

The above furnished information is believed to be correct on the date it was published. This SDS is provided without any warranty expressed or implied. Users should consider this data 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 and disposal of these materials and the safety and health of employees and customers and the protection of the environment.