

Product and Manufacturer Information

Name: Liquid Turf Fertilizer

Synonyms: 17-2-3, 17-2-5, 18-3-6, 16-4-4, 17-1-3, 17-0-5. 17-0-3, 17-0-2 etc.; Urea Base Mix; NPK Fertilizer Recommended Use: Fertilizer for Turfgrasses Manufacturer: Morral Companies, LLC; P.O. Box 26, Morral OH 43337. Phone: 740-465-3251 For Transportation Emergencies call Chemtrec at 800-424-9300 For Other Emergencies call 911 and/or Appropriate Regulatory Agencies

Hazard Identification

GHS Classification: none

This material does not present any unusual hazards under ordinary conditions. Use general precautions when handling, transporting, and storing this material.

Composition / Information on Ingredients

Component	CAS #	<u>% by weight</u>
Urea	57-13-6	10-40
Ammonium Polyphosphate	68333-79-9	6-15
Potassium Chloride	7447-40-7	3-10

The material is a mixture of these ingredients with water, within the ranges specified, as determined by product grade.

First Aid Measures

<u>Skin Contact</u>: The material may be especially irritating to cuts, abrasions, and open wounds. If exposure occurs, rinse the affected area thoroughly with water. Treat other irritated areas by washing with soap and water.

<u>Eye Contact</u>: Minor irritation is likely if exposure occurs. Rinse eyes thoroughly with water for 15 minutes. Remove contacts if necessary. Seek medical attention if irritation persists.

<u>Respiration</u>: Remove to fresh air and seek medical attention. Inhalation of any liquid or mist may result in breathing difficulty. <u>Ingestion</u>: Swallowing large amounts may result in vomiting, diarrhea, cramps, and other gastrointestinal disturbances. Dilute stomach contents with water. Seek medical attention.

Fire Fighting Measures

Flash point: does not apply

Extinguishing Materials: All standard agents are acceptable.

Special Hazards and Precautions: Ammonia, Oxides of Nitrogen, and Chlorine gases may be evolved at elevated temperatures.

Accidental Release Measures

Do not allow to enter drains waterways, etc. Contain large spills by diking with soil or other material. Small spills may be covered with an absorbent material. Do not dilute with water or use water to flush material to another location. For uncontrolled or major releases, response by trained personnel using preplanned procedures is recommended. Refer to Exposure Controls / Personal protection to determine proper PPE. Consult applicable regulatory agencies for spill reporting and disposal.



Handling and Storage

Standard conditions are generally acceptable. Long term storage may result in settling of solids and/or formation of crystals. Avoid storage or transfer using copper bearing, zinc-clad, or aluminum vessels or equipment.

Exposure Controls / Personal Protection

Skin exposure should be kept minimal by wearing gloves, long pants, and long sleeved shirts. If splashing may occur, wear protective goggles. Ingestion and respiration of the material are unusual occurrences under typical conditions of use.

Physical and Chemical Properties

Appearance: clear to slightly hazy, colorless or pale green liquid Odor: none to slight ammonia pH: neutral Freezing Point: ~32F Boiling Point: ~212F Solubility in Water: complete Density: 1.0 to 1.3 g/ml (varies with fertilizer content)

Stability and Reactivity

This material is stable under normal use and storage conditions. There may be some settling of solids if the material is stored for long periods. This product is not a reactivity or polymerization hazard.

Toxicological Information

This material is not known to be a toxicity hazard to animals or humans.

Ecological Information

Ecotoxicity for this product is low. It contains plant nutrients. It incorporates into biological processes.

Disposal Considerations

This material is not defined as a hazardous waste by the U.S.E.P.A. Dispose of this material as recommended by federal, state, and local regulations.

Transport Information

This material is not regulated as a hazardous material by the U.S.D.O.T. Use normal transportation safety precautions.



Regulatory Information

SARA Title III Hazard Class: not considered a hazard CERCLA Reportable Quantity: not applicable. TSCA: not regulated RCRA Hazardous Waste Classification: not regulated

Additional Information

Revision 1, prepared 19 March 2015

This data is accurate to the best of our knowledge, and is furnished without warranty of any kind. Users should determine the suitability of this material for its intended purpose. The user assumes all risks associated with the use of this product.