MATERIAL SAFETY DATA SHEET
PRODUCT NAME: KLEENSTART (6-0-0)

MSDS No.: 99-57612 Date of Preparation: 05/06/97 Date of Revision: 11/25/02
NFPA HAZARD RATINGS: Health (2) Fire (0) Reactivity (0) (0) least (1) slight (2) moderate (3) high (4) extreme

Section 1-CHEMICAL PRODUCT and COMPANY IDENTIFICATION

General Product Composition: Proprietary Polymerous Hydrosol Leachate with Nitrogen Precursors. **Intended Use:** Turf Management.
Manufacture For: **Spindler Enterprises, Inc. P.O. Box 6112, Lakeland, Fl 33807.** Phone: (863) 619-9822.
Emergency Telephone: CHEMTREC 1-800-424-9300.

Section 2-COMPOSITION/INFORMATION on INGREDIENTS

HAZARDOUS INGREDIENT NAME	FORMULA	CAS No.	Wt. %
Urea	$CO(NH_2)_2$	57-13-6	
Ammonium Nitrate	NH_4NO_3	6484-52-2	
Ammonium Sulfate	$(NH_4)_2SO_4$	7783-20-2	

TRACE IMPURITIES: organic acids derived from composting. **EXPOSURE LIMITS: ((REFER TO SECTION 8))**

Section 3-HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Potential Health Effects: **Primary Entry Routes:** Eyes, skin, ingestion. **Target Organs:** Eyes, skin, gastrointestinal tract. **Acute Effects:** *Inhalation:* Not normally a problem. *Eye:* May cause irritation, redness and/or burning. *Skin:* May cause irritation, redness and/or burning. *Ingestion:* May be harmful if swallowed. May cause abdominal cramps, nausea, vomiting and/or diarrhea. **Carcinogenicity: IARC:** NO, **NTP:** NO, **OSHA:** NO. **Medical Conditions Aggravated by Long-Term Exposure:** Persons with existing skin lesions should exercise caution when using or handling this product. These individuals should also avoid all contact with possible spray mist. **Chronic Effects:** Prolonged or repeated skin contact may cause dermatitis. Ingestion may irritate gastrointestinal tract.

Section 4-FIRST AID MEASURES

Inhalation: Remove to fresh air. **Eye Contact:** Flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.
Skin Contact: Remove any contaminated clothing. Wash affected area with mild soap and water. Get medical attention if irritation persists or develops. Launder contaminated clothing before reuse. **Ingestion:** Give 2 or 3 glasses of water to drink. Induce vomiting by touching back of throat with finger. Get immediate medical attention. *After first aid, get appropriate in-plant, paramedic, or community medical support.*
Note to Physicians: No specific antidote. Treat symptomatically. **Special Precautions/Procedures:** None known.

Section 5-FIRE FIGHTING MEASURES

Flash Point: NA. **Flammability Classification:** Non-flammable. **Extinguishing Media:** Water spray, dry chemical, carbon dioxide, or foam. **Unusual Fire or Explosion Hazards:** Containers exposed to fire may rupture violently. Keep containers cool with water spray.
Hazardous Combustion Products: Oxides of nitrogen, sulfur and carbon. **Fire-Fighting Instructions:** Fire fighters should wear full protective equipment and self-contained breathing apparatus. Prevent runoff from entering water systems. Keep non-essential personnel out of fire area.

Section 6-ACCIDENTAL RELEASE MEASURES

Spill/Leak Procedures: Small Spills: Wear protective equipment. Prevent spill from entering water systems. Absorb spill on inert material such as clay, vermiculite or kitty litter. Place absorbed material into labeled container for proper disposal. **Large Spills:** Dike to prevent spill from entering water systems. **Cleanup:** If spill is of major proportions, soil may need to be excavated.

Section 7- HANDLING and STORAGE

Handling Precautions: Avoid contact with skin, eyes and clothing. Do not take internally. Wash after handling. Do not contaminate water by disposal of equipment wash waters. **Storage Requirements:** Store in a cool, dry, locked area and out of reach of children and animals.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: KLEENSTART (6-0-0)

Section 8-EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use in open, outdoor areas only. **Respiratory Protection:** In confined areas, NIOSH/MSMA approved respirator.
Protective Clothing/Equipment: Safety glasses/goggles/face shield recommended. Impervious gloves/boots, and protective clothing suggested.

Section 8 (*Cont.*)
EXPOSURE GUIDELINES: *{Numbers represent mg/M^3 unless otherwise indicated}.*

	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
Ingredient	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Ammonium Nitrate	5*	NA	NA	NA	NA	NA	NA

*as respirable dust, if generated; also CA OSHA limit.

Section 9-PHYSICAL/CHEMICAL PROPERTIES

Physical State: Liquid. **Appearance & Odor:** Dark, ruby red. **Solubility in Water:** Soluble.
Density: 9.6 lbs. per gal. **Specific Gravity (@ 68°F):** 1.152. **pH** (@68°F): 4.5.

Section 10-STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use and storage. DO NOT FREEZE. **Polymerization:** NO. **Chemical Incompatibilities:** None known. **Conditions to Avoid:** Extreme heat. Do not freeze. **Hazardous Decomposition Products:** Oxides of nitrogen, sulfur or carbon.

Section 11-TOXICOLOGICAL INFORMATION

No lab tests for this product for the following: Eye Effects, Skin Effects, Acute Inhalation Effects, Acute Oral Effects, Chronic Effects, Carcinogenicity, Mutagenicity & Teratogenicity.

Section 12-ECOLOGICAL INFORMATION

Ecotoxicity: Accidental spills of undiluted product may cause vegetation kills. **Environmental Fate:** Keep out of any body of water.

Section 13-DISPOSAL CONSIDERATIONS

Disposal: Consult local, state or federal regulatory agencies for acceptable disposal procedures and locations. Disposal in waterways or sewers may be prohibited.

Section 14-TRANSPORT INFORMATION

DOT Transportation Data (49 CFR 172.101): Shipping Name: Not regulated.

Section 15-REGULATORY INFORMATION

EPA Regulations: Not regulated by EPA under FIFRA and FQPA. **OSHA Regulations:** Refer to Sections 2 & 8. **State Regulations:** Urea appears on the CA & MN RTK Chemical Lists; ammonium nitrate appears on the FL & NJ RTK Chemical Lists and ammonium sulfate appear on the FL RTK Chemical List. Check with specific state authorities since regulations vary within the states. **SARA Title III; Sections 311/312: Sudden Release of Pressure (N), Reactivity (N), Fire (N), Immediate (Acute) Health (Y), Delayed (Chronic) Health (N).**

Section 16-OTHER INFORMATION

DISCLAIMER: The information on this MSDS was obtained from current and reliable sources intended for persons having related technical skills. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. It is the users responsibility to determine safe conditions for use of the product and to assume liability for loss, injury, damage, or expense resulting from improper use.
ND= Not Determined; NA= Not Applicable; NIA= No Information Available