

Section 1 - Product and Company Identification

Product Name	Root & Groom 3-16-15
Manufacturer or Supplier	3 Tier Technologies 413 W. 13 th St
	Sanford, Florida 32771
Product Use	Liquid Fertilizer NPK

Phone	877-226-7498
Emergency Phone	407-808-4653

Section 2 - Hazard Identification

Potential Health Effects

This material is not a "health hazard" or "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration Hazard Communication Standard, 20 CFR 1910.1200

Classification of the substance or mixture Classification according to 29 CFR 1910.1200 Eye Irritation Category 2B

Label Elements



Signal Word:	WARNING
Hazard Statement:	H320 - Causes eye irritation
	H313 - May be harmful in contact with skin
	H302 - Harmful if swallowed
Precautionary Statement:	
(General)	P101 - If medical advice is needed, have product container or label at hand.
	P102 - Keep out of reach of children.
	P103 - Read label before use.
	PIOS - Redu label belole use.
Precautionary Statement:	
(Prevention)	P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
	P262 - Do not get in eyes, on skin, or on clothing.
	P281 - Use personal protective equipment as required
	P235 + P410 - Keep cool. Protect from sunlight.
Precautionary Statement:	
(Response)	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for 15 to 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337 + P313 - If eye irritation persists: Get medical advice/attention.
	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water for 15 to 20 minutes.

Section 3 - Composition and Information on Ingredients

Component Ingredients	Hazardous Percent	CAS Number	Threshol	d Limit Valu	ies
			OSHA	ACG	SIH
			PEL STEL	TLV	STEL
Urea	No	57-13-6	-NONE ESTA	BLISHED-	
Ammonium Hydroxide	No	1336-21-6	-NONE ESTA	BLISHED-	
Phosphoric Acid	No	13598-36-2	-NONE ESTA	BLISHED-	
Potassium Hydroxide	No	1310-58-3	-NONE ESTA	BLISHED-	
Brown Coal	No	68525-81-5	-NONE ESTA	ABLISHED-	

Section 4 - First Aid Measures

Skin Contact	Skin Absorption 🛛 Eye Contact 🔷 Inhalation	\Box Ingestion
Skin Contact	Dry and/or red itchy skin - Flush with water for 15 minutes. Remove conta medical attention if irritation persists.	minated clothing and shoes. Get
Skin Absorption	n Dry and/or red itchy skin - Flush with water for 15 minutes. Get medical at	tention if irritation persists.
Eye Contact	Eye irritation - Flush with water for 15 minutes. Get medical attention if ir	ritation persists.
Inhalation	Generally not considered an inhalation hazard.	
Ingestion	Do not induce vomiting, contact a physician or poison control center.	

Section 5 - Fire Fighting Measures

Flammable

Flammable Conditions	None		
Methods of Extinguishing	Use media suitable to ext chemical.	tinguish source of fire. Water fog or spray	, foam, carbon dioxide, or dry
Flashpoint degrees (c)	N/A		
Flashpoint Method	N/A		
Auto Ignition Temp (c)	N/A	Upper Flammable Limit (% by volume)	N/A
		Lower Flammable Limit (% by volume)	N/A

Explosion - Sensitivity to Impact

N/A

Explosion - Sensitivity to Static Discharge

N/A

Protection and Procedures for FireFighters

Use water fog or spray, foam, carbon dioxide, or dry chemical to control fire.

Protective Equipment for Firefighters

Use approved self-contained breathing apparatus and full protective gear. Avoid smoke inhalation.

Section 6 - Accidental Release Measures

Leak and Spill Procedures

Environmental Precautions: Keep out of water supplies, lakes, ponds, streams, and rivers. Material Released or Spilled: Promptly mop up or pump up material and place in suitable container for use as a fertilizer or for proper disposal in accordance with local, state and federal regulations.

Section 7 - Handling and Storage

Handling Procedures and Equipment

Avoid contact with eyes. Use only in well ventilated areas. Wash thoroughly after handling. Avoid prolonged or repeated contact with the skin. Keep Out Of Reach Of Children. Other Precautions: Transfer using chemical-resistant plastic or stainless steel tanks, pumps, and valves.

Storage Requirements

Store in cool, dry area. Keep container closed when not in use. Keep Out Of Reach Of Children. Store in temperatures between 40 and 78 degrees F.

Section 8 - Exposure Controls - Personal Protection

Specific Engineering Controls

Adequate ventilation required to maintain a fresh airflow.

Gloves	Respirator	🗹 Eye	✓ Footwear	Clothing	Other

Personal Protective Equipment

Respiratory Protection: If mist or dust conditions should be present use respirator approved by NIOSH. Eye Protection: Goggles or face shield. Skin Protection: Adequate clothing should be worn to prevent skin contact. Other Protective Clothing or Equipment: Eye bath, safety shower. Work Hygienic Practices: Wash all clothing before wearing. Wash all exposed skin surfaces with soap and water after using this product.

Section 9 - Physical and Chemical Properties

Physical State	Liquid
Odor and Appearance	Dark Brown Liquid, Slight Ammonia Odor
Solubility in Water	Complete
Specific Gravity	1.354
Vapor Density (air = 1)	N/A
Vapor Pressure (mmHg)	N/A
Evaporation Rate	N/A
Boiling Point (° C)	212 F (F) 100 C (C)
Freezing Point (°C)	32 F (F) 0 C (C)
pH @ 20 Celsius	8.0 @ 26.2°C
Coefficient of Water/Oil Distribution	N/A

Section 10 - Stability and Reactivity

Chemical Stability

Stability Conditions

Product is stable.

□ Incompatibility with Other Substance

Incompatibility conditions

Oxidants and acids may cause degradation

Reactivity Conditions

Extremely high temperatures.

Hazardous Decomposition Products

Burning may results in carbon monoxide fumes

Section 11 - Toxicological Information

Effects of Acute Exposure

Eye contact may cause irritation and redness.

Effects of Chronic Exposure

Prolonged contact with skin may cause irritation or dermatitis in sensitive individuals.

Irritancy	Slight		
Skin Sensitization	Redness	Respiratory Sensitize	Mild
Carcinogenicity - IARC	No	Carcinogenicity - ACGIH	No
Reproductive	No	Teratogenicity	No
Embrotoxicity	No	Mutagenicity	No

Section 12 - Ecological Information

Ecological Information

Not Known

Section 13 - Disposal Considerations

Waste Disposal

If product cannot be disposed of according to use directions on label. Dispose of in accordance with federal, state, and local environmental laws and regulations.

Section 14 - Transportation Information

U.S. DOTNot RegulatedIMDGNot RegulatedICAO/IATANot Regulated

Transport Information

Other Shipping Description: Fertilizing Compounds (Manufactured), Liquid. NMFC Item 6810 Sub 6, LTL Class 70

Section 15 - Regulatory Information



Health Hazard	0	Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
Fire Hazard	0	Materials that will not burn.
Instability	0	Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
Special Hazard		

Section 16 - Other Information / Warranty / Disclaimer

Revised	05/01/2021		Health	0	
Prepared By	Lisa		Flammability	0	
			Reactivity	0	
			Personal Protection	В	ØR + 🗲
Loolth Llozor		No cignificant	rick to boolth		

Health Hazard	0	No significant risk to health
Flammability	0	Materials that will not burn
Reactivity	0	Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal Protection	В	Safety Glasses + Gloves

Disclaimer

HMIS Ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS ratings are not required on MSDS's by OSHA's CFR 1910.1200, we choose to provide them as a service to our customers using HMIS. These ratings are to be used only with a fully implemented HMIS program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS Implementation Manual.

When two ratings are provided for Health, the first represents the material 'as supplied,' and the second represents the material in use.'

Other Information

Neither this data sheet nor any statement contained herein grants or extends any license, expressed or implied, in connection with patents issued or pending which may be the property of the manufacturer or others. The information in this data sheet has been assembled by the manufacturer based on its own studies and on the work of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness, or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) to the Vendee, the Vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy, or furnishing of such information.