

SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME HydroGro 7881 East Gray Road Scottsdale, AZ 85260 USA

Safety Data Sheet Competent Person: Customer Service

DATE PREPARED:

January 2, 2017

None

Acute Toxicity (oral)

Serious eye damage/eye irritation

 EMERGENCY TELEPHONE

 Chemtrec U.S.-Canada:
 800-424-9300

 Chemtrec International:
 703-527-3887

 Information:
 (480) 248-9336

 Fax:
 (480) 248-9337

 Sales@hydrogro.com
 528-5337

REVISION DATE: January 2, 2017

Category 4

Category 1

PRODUCT NAME:Str8 CalFORMULA:Preparation/MixturePRODUCT USE:Supplement for professionally maintained golf courses, sport turf, lawn and landscaping

Section 2: Hazards Identification

GHS Hazard Class Physical Hazards:

Health Hazards:

Label elements:



\vee \vee		
Signal word: Hazard Statement:		Danger H302: Harmful is swallowed H318: Causes serious eye damage
Precautionary Statements:	Prevention	P264: Wash hands thoroughly after handling P270: Do not eat, drink or smoke when using this product P280: Wear protective gloves/protective clothing/ eye protection/ face protection
	Response	P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present an easy to do. Continue rinsing P310: Immediately call a POISON CENTER or doctor/physician. P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth
	Storage Disposal	P405: Store locked up P501: Dispose of contents/container in accordance with the waste disposal requirements of your country, state, or local authorities.
		Hazards not otherwise classified (HNOC) or not covered by GHS - None
HAZARD CLASSIFICATION:		DOT: Hazardous, IMDG & IATA: Not applicable
FIRE AND EXPLOSION:		Not Considered flammable or combustible.
POTENTIAL HEALTH EFFECTS:		<1 % of mixture consists of ingredients of unknown acute toxicity
APPEARANCE:		Clear concentrate



Component	Health	Flammability	Reactivity	Special
	(Blue)	(Red)	(Yellow)	(White)
Str8 Cal	2	0	1	

Section 3: Composition, Information on Ingredients

PRODUCT COMPOSITION	APPROX %	CAS NO.	EC NUMBER	CANADA DSL
Nitric Acid, Ammonium Calcium Salt	<70	15245-12-2	239-289-5	Y
Water	< 40	7732-18-5	231-791-2	Y

Some items on this SDS may be designated as trade secrets (TS). Bonafide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13.

Section 4: First Aid Measures

Description of First Aid Measures

Inhalation	If inhaled, remove to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, keeping eyelids open check for and remove any contact lenses. Get medical attention immediately.
Ingestion	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if you feel unwell.
Most important symptoms and effects, both acute	
Symptoms/Injuries after Inhalation	May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Symptoms/Injuries after Skin Contact Symptoms/Injuries after Eye Contact Symptoms/Injuries after Ingestion	No known significant effects or critical hazards Causes serious eye damage Harmful if swallowed. May cause burns to mouth, throat and stomach.

Indication of any immediate medical attention and special treatment needed

No further relevant information available

General Information

Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

Section 5: Fire-fighting Measures

Suitable extinguishing media Unsuitable extinguishing media

Special hazards arising from the substance or mixture Protective actions fire-fighters

Firefighting equipment/instructions

Use flooding quantities of water for extinction Do NOT use chemical extinguisher or foam or attempt to mother the fire with steam or sand. No specific fire or explosion hazard Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Self-contained breathing apparatus and full protective clothing must be worn in case of fire



General fire hazards

Use standard firefighting procedures and consider the hazards of the other involved materials. Nonflammable

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Provide adequate ventilation. Put on appropriate personal protective equipment.
Methods and materials for containment and cleaning up	Move containers from spill area. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, or air)

Section 7: Handling and Storage

Precautions for safe handling	Put on appropriate personal protective equipment (see section 8) Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool well ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Keep away from organic material, oil and grease.

Specific uses

This product is intended to be used for foliar applications.

Section 8: Exposure Controls/Personal Protection

Occupational exposure limits

PRODUCT COMPOSITION	ACCGIH TLV	OSHA PEL	NIOSH REL
None			
Biological limit values	No biological exposure	limits noted for the ingredients.	
Appropriate engineering controls	If user operations generate dust, fumes, gas vapor, or miss use process enclosures local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.		worker exposure to airborne
Individual protection members, such as po	ersonal protective equipment		
Eye/face protection	assessment indicates this	Safety eyewear complying with an improved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dust. Recommended: Tightly-fitting googles	
Skin protection			
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier		
Other	Wear perfect chemical r	esistant clothing	
			Product: Str8 Cal SDS Page 3 of 7



Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations:	The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes

and skin. Maintain an ergonomically appropriate working environment. Section 9: Physical and Chemical Properties

	PRODUCT CRITERIA
APPEARANCE - COLOR:	Clear
PHYSICAL STATE:	Liquid
ODOR:	Slight Odor
ODOR THRESHOLD	No data available
PH	No data available
MELTING POINT/FREEZING POINT:	No data available
INITIAL BOILING POINT AND BOILING RANGE:	> 100°C
FLASH POINT:	No data available
EVAPORATION RATE:	No data available
FLAMMABILITY (Solid, gas)	Not flammable
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	Not Measured
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C):	1.36
SOLUBILITY(IES)	Soluble in water
OXIDIZING PROPERTIES	No data available
PARTITION COEFFICIENT: n-octanol/water	No data available
AUTO IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	No data available

Section 10: Stability and Reactivity

Reactivity:No information knownChemical Stability:Stable under recommended conditions.Possibility of Hazardous Reactions:Under normal conditions of storage and use, hazardous reactions will not occur.Conditions to Avoid:Avoid contamination by any source including metals, dust and organic materials.Incompatibility (Materials to avoid):Alkalis, combustible materials, reducing materials, organic materials, acidsHazardous decomposition products:Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological Information

Information on likely routes of exposure:

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful
Skin Contact	Causes skin irritation
Eye Contact	Causes serious eye damage
Ingestion	Do not swallow
Symptoms related to the physical, chemical and toxicological characteristics	May cause respiratory irritation.



Acute Toxicity

Product / Ingredient name	Toxicity Criteria	Toxicity Information
Nitric Acid, ammonium calcium salt	LD50 (Oral/Rat)	500mg/kg
Nitric Acid, ammonium calcium salt	LD50 (Dermal Rat)	>2000mg/kg

Skin corrosion/irritation	Causes skin irritation
Serious eye damage/eye irritation	Causes serious eye damage
Respiratory or skin sensitization	
Respiratory sensitization	Not determined
Skin sensitization	This product is not expected to cause skin sensitization
Germ cell mutagenicity	No effects known
Carcinogenicity	No classification data on carcinogenic properties of this material is available from the EPA, IARC, ACGIH, NTP, or OSHA
OSHA specifically regulated substances (29 CSR 1910.1001 – 1050)	Not listed
US national toxicology program (NTP) report on carcinogens	Not available
Reproductive toxicity	No effects known
Specific organ toxicity- single exposure	No known significant effects or critical hazards
Specific target organ toxicity repeated exposure	Not classified
Aspiration hazard	No effects known

Section 12: Ecological Information Persistence and degradability: No information is available

Toxicity

Chemical Constituent	Result	Species	Exposure
Nitric Acid, ammonium calcium salt	Acute LC50 447mg/L fresh water	Fish-Labeo boga	48 hours
Nitric Acid, ammonium calcium salt	Acute EC50 >100mg/L fresh water	Aquatic invertebrates- Daphnia	48 hours
Nitric Acid, ammonium calcium salt	Acute LC50 >100mg/L fresh water	Aquatic plants- Heterosigma akashiwo	72 hours
Nitric Acid, ammonium calcium salt	Acute EC50 >1000mg/L activated sludge	Micro-organism	3 hours

Aquatic Toxicity

Persistence and degradability

Readily biodegradable in pants and soils



Bioaccumulative potential:	The product does not show any bioaccumulation phenomena. The product is not expected to harm the environment when used properly according to directions.
Mobility in soil:	This product may move with surface or groundwater flows because of its water solubility is: high.
PBT and vPvB assessment:	PBT/vPvB assessment not available as chemical assessment not required/not conducted
Other adverse effects:	No information is available.

Section 13: Disposal Considerations

Waste from residues/unused products:	Follow the waste disposal requirements of your country, state, or local authorities
Contaminated packaging:	Contaminated packaging material should be disposed of as stated above for residues and unused product.
Rinsate:	Do not dispose of rinse water containing product in a sanitary sewer system or storm water drainage system.

Section 14: Transport Information

DOT UN Number Not applicable UN proper shipping name Transportation hazard class Class N/A Subsidiary risk N/A Packing group N/A Special precautions for user Read safety instructions, SDS and emergency procedures before handling ERG number N/A DOR information on packaging may be different from that listed

DOT

Section 15: Regulatory Information

US Federal Regulations TOXIC SUBSTANCE CONTROL ACT (TSCA) STATUS: This product is in compliance with rules, regulations, and orders of TSCA. All components are either listed on the TSCA inventory or are considered exempt.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: No listed Hazards categories: Immediate Hazard – No Delayed Hazard – No Fire Hazard – No Pressure Hazard – No Reactivity Hazard – No SARA 302 Extremely hazardous substance Not listed SARA 311/312 Hazardous chemical Immediate (acute) health hazard SARA 313 (TRI Reporting) Not regulated



CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute. The California proposition 65 chemical(s) contained in this product are: nitric acid, ammonium calcium salt

STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

Massachusetts's hazardous substance(s):	None
Pennsylvania	None
New Jersey	None
CANADA:	

WHMIS-2015: This SDS is in compliance with WHMIS 2015 (HPR / new HPA).

EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures.

Section 16: Other Information

Initial issue date:	December 5, 2016
Final revision date:	December 5, 2016
Revision Number:	0
Revision explanation	Initial version
Information Sources:	RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

"Disclaimer: This document is generated to distribute health, safety and environmental data. It is not a specification sheet and none of the displayed data should be construed as a specification. Information on this SDS sheet was obtained from sources which we believe are reliable, and we believe that the information is complete and accurate. However, the information is provided without any warranty, express or implied, regarding its correctness. Some of the information presented and conclusions drawn are from sources other than direct test data of the substance. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may also be beyond our knowledge. It is the user's responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. If the product is used as a component in another product, this SDS information may not be applicable. For these reasons, we do not assume any responsibility and expressly disclaim liability for any loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product."