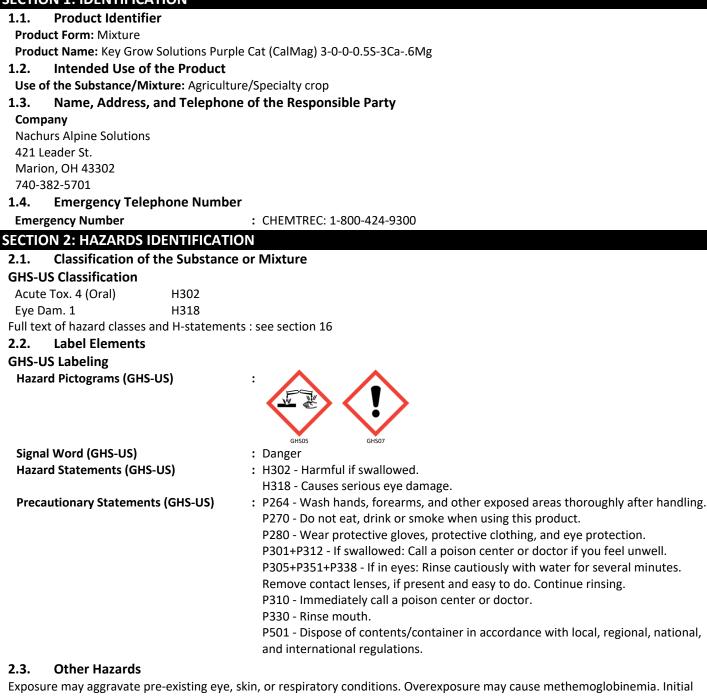


Safety Data Sheet According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 02/20/2018 Date of Issue: 12/12/2017

Version: 2.0

SECTION 1: IDENTIFICATION



manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS			
3.1. Substance			
Not applicable			
3.2. Mixture			
Name	Product Identifier	%	GHS-US classification
		•	•

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Water	(CAS-No.) 7732-18-5	Proprietary	Not classified
Calcium nitrate.4H2O	(CAS-No.) 13477-34-4	Proprietary	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Nitric acid, magnesium salt, hexahydrate	(CAS-No.) 13446-18-9	Proprietary	Not classified
Ammonium thiosulfate	(CAS-No.) 7783-18-8	Proprietary	Not classified

Full text of H-phrases: see section 16

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Harmful if swallowed. Causes serious eye damage. Overexposure to this material may result in methemoglobinemia. Methemoglobinemia decreases the blood's ability to carry oxygen and results in symptoms such as dizziness, drowsiness, headache, shortness of breath, blue skin and lips, rapid heart rate, unconsciousness, and possibly death. **Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Nitrogen oxides. Calcium oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

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6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Agriculture/Specialty crop

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

8.2. Exposure Controls

Appropriate Engineering Controls

 Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
 Gloves. Protective clothing. Protective goggles.

Personal Protective Equipment

Materials for Protective Clothing	:
Hand Protection	:
Eye and Face Protection	:
Skin and Body Protection	:
Respiratory Protection	:

: Chemically resistant materials and fabrics.

: No data available

: No data available

- : Wear protective gloves.
- : Chemical safety goggles.
- : Wear suitable protective clothing.
- : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

	protection.
Other Information	: When using, do not eat, drink or smoke.
SECTION 9: PHYSICAL AND CHI	EMICAL PROPERTIES
9.1. Information on Basic Phy	vsical and Chemical Properties
Physical State	: Liquid
Appearance	: Nearly colorless
Odor	: No data available
Odor Threshold	: No data available
рН	: 7.2
Evaporation Rate	: No data available
Melting Point	: No data available

Freezing Point

Boiling Point

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Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Specific Gravity	: 1.13
Density Solubility	: 9.4 lb/gal
Solubility	: No data available
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available
9.2. Other Information No additional info	
SECTION 10: STABILITY AND REACTIVITY	
10.1. Reactivity : Hazardous reactions will	
-	ommended handling and storage conditions (see section 7).
-	Hazardous polymerization will not occur.
-	extremely high or low temperatures, and incompatible materials.
10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers.	
10.6. Hazardous Decomposition Products:	None expected under normal conditions of use.
SECTION 11: TOXICOLOGICAL INFORMA	TION
11.1. Information on Toxicological Effe	cts
Acute Toxicity: Oral: Harmful if swallowed.	
Key Grow Purple Cat (CalMag) 3-0-0-0.5S-3Ca	6Mg
ATE (Oral)	1,976.28 mg/kg body weight
Calcium nitrate.4H2O (13477-34-4)	
ATE (Oral)	500.00 mg/kg body weight
Nitric acid, magnesium salt, hexahydrate (134	
, ,	
Nitric acid, magnesium salt, hexahydrate (134	446-18-9)
Nitric acid, magnesium salt, hexahydrate (134 LD50 Oral Rat	446-18-9)
Nitric acid, magnesium salt, hexahydrate (134 LD50 Oral Rat Ammonium thiosulfate (7783-18-8)	446-18-9) 5440 mg/kg
Nitric acid, magnesium salt, hexahydrate (134 LD50 Oral Rat Ammonium thiosulfate (7783-18-8) LD50 Oral Rat	446-18-9) 5440 mg/kg
Nitric acid, magnesium salt, hexahydrate (134 LD50 Oral Rat Ammonium thiosulfate (7783-18-8) LD50 Oral Rat Skin Corrosion/Irritation: Not classified	446-18-9) 5440 mg/kg > 2000 mg/kg body weight
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Nitric acid, magnesium salt, hexahydrate (134 LD50 Oral Rat Ammonium thiosulfate (7783-18-8) LD50 Oral Rat Skin Corrosion/Irritation: Not classified pH: 7.2 Serious Eye Damage/Irritation: Causes serious pH: 7.2 Respiratory or Skin Sensitization: Not classified Germ Cell Mutagenicity: Not classified Carcinogenicity: Not classified Reproductive Toxicity: Not classified	446-18-9) 5440 mg/kg > 2000 mg/kg body weight eye damage. ed re): Not classified
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Nitric acid, magnesium salt, hexahydrate (134LD50 Oral RatAmmonium thiosulfate (7783-18-8)LD50 Oral RatSkin Corrosion/Irritation: Not classifiedpH: 7.2Serious Eye Damage/Irritation: Causes seriouspH: 7.2Respiratory or Skin Sensitization: Not classifiedGerm Cell Mutagenicity: Not classifiedCarcinogenicity: Not classifiedSpecific Target Organ Toxicity (Single ExposurSpecific Target Organ Toxicity (Repeated ExpoAspiration Hazard: Not classifiedSymptoms/Injuries After Inhalation: ProlongeSymptoms/Injuries After Skin Contact: Prolon	446-18-9) 5440 mg/kg > 2000 mg/kg body weight eye damage. ed re): Not classified osure): Not classified ed exposure may cause irritation. nged exposure may cause skin irritation.
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Nitric acid, magnesium salt, hexahydrate (134LD50 Oral RatAmmonium thiosulfate (7783-18-8)LD50 Oral RatSkin Corrosion/Irritation: Not classifiedpH: 7.2Serious Eye Damage/Irritation: Causes seriouspH: 7.2Respiratory or Skin Sensitization: Not classifiedGerm Cell Mutagenicity: Not classifiedCarcinogenicity: Not classifiedSpecific Target Organ Toxicity (Single ExposurSpecific Target Organ Toxicity (Repeated ExpoAspiration Hazard: Not classifiedSymptoms/Injuries After Inhalation: ProlongeSymptoms/Injuries After Skin Contact: ProlorSymptoms/Injuries After Ingestion: This mate	446-18-9) 5440 mg/kg > 2000 mg/kg body weight eye damage. ed re): Not classified osure): Not classified ed exposure may cause irritation. red exposure may cause skin irritation.
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Nitric acid, magnesium salt, hexahydrate (134LD50 Oral RatAmmonium thiosulfate (7783-18-8)LD50 Oral RatSkin Corrosion/Irritation: Not classifiedpH: 7.2Serious Eye Damage/Irritation: Causes seriouspH: 7.2Respiratory or Skin Sensitization: Not classifiedGerm Cell Mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive Toxicity: Not classifiedSpecific Target Organ Toxicity (Single ExposurSpecific Target Organ Toxicity (Repeated ExpoAspiration Hazard: Not classifiedSymptoms/Injuries After Inhalation: ProlongeSymptoms/Injuries After Eye Contact: CausesSymptoms/Injuries After Ingestion: This mateamounts.Chronic Symptoms: None expected under nor	446-18-9) 5440 mg/kg > 2000 mg/kg body weight eye damage. ed re): Not classified osure): Not classified ed exposure may cause irritation. nged exposure may cause skin irritation. permanent damage to the cornea, iris, or conjunctiva. rial is harmful orally and can cause adverse health effects or death in significant mal conditions of use.
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. Ecology - General

: Not classified.

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12.2. Persistence and Degradabilit	:y
Key Grow Purple Cat (CalMag) 3-0-0-0.5	S-3Ca6Mg
Persistence and Degradability	Not established.
12.3. Bioaccumulative Potential	
Key Grow Purple Cat (CalMag) 3-0-0-0.5	S-3Ca6Mg
Bioaccumulative Potential	Not established.
12.4. Mobility in Soil No additional information available	
12.5. Other Adverse Effects	
Other Information	: Avoid release to the environment.
SECTION 13: DISPOSAL CONSIDERA	TIONS
13.1. Waste Treatment Methods	
Waste Disposal Recommendations: Dis	pose of contents/container in accordance with local, regional, national, and international
regulations.	
•	remain hazardous when empty. Continue to observe all precautions.
Ecology - Waste Materials: Avoid releas	
SECTION 14: TRANSPORT INFORMA	
	were prepared in accordance with certain assumptions at the time the SDS was
-	er of variables that may or may not have been known at the time the SDS was issued.
	Not regulated for transport
14.2. In Accordance with IMDG Not regulated for transport	
14.3. In Accordance with IATA Not regulated for transport	
SECTION 15: REGULATORY INFORM	IATION
15.1. US Federal Regulations	
Key Grow Purple Cat (CalMag) 3-0-0-0.5	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Ammonium thiosulfate (7783-18-8)	
Listed on the United States TSCA (Toxic S	Substances Control Act) inventory
Water (7732-18-5)	
Listed on the United States TSCA (Toxic S	Substances Control Act) inventory
15.2. US State Regulations	
Ammonium thiosulfate (7783-18-8)	
U.S. Massachusotts Bight To Know List	+

U.S. - Massachusetts - Right To Know List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision	: 02/19/2018
Other Information	 This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].
CLIC Full Tout Dhuman	

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
H302	Harmful if swallowed
H318	Causes serious eye damage

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations