

Section 1 – Product and Company Identification

Product Name	Growers Mineral Solutions, GMS
Recommended Uses	Fertilizer, Livestock Feed
Manufacturer	Growers Mineral Corp. PO Box. 1750 Milan, OH 44846 USA Tel: 1-800-437-4769
Emergency Telephone Numbers	CHEMTREC: 1-800-424-9300 (24 hours)

Section 2 – Hazards Identification

Classification Eye irritation

Label Elements

Signal Word Warning

Pictogram



Hazardous Statement

May cause irritation to eyes, breathing, and ingestion

Precautionary Statement

Avoid eye contact. Wash thoroughly after handling. Do not breathe vapor or spray mist. Do not eat, drink, or smoke while using material.

IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. If easy to do so, remove any contact lenses. If eye irritation persists or develops, get medical attention.

IF INHALED: Remove to fresh air. If not breathing, give artificial respiration. If difficulty breathing, give oxygen. If irritation persists or develops, get medical attention.

IF SWALLOWED: Do not induce vomiting. Drink large amounts of water (or milk, if available) to dilute the mixture. If irritation persists or develops, get medical attention.

IF ON SKIN: Immediately wash with plenty of water. Remove contaminated clothing and shoes. If irritation persists or develops, get medical attention.

IN AN EVENT OF SPILL OR LEAK: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment.

Section 3 – Composition and Ingredients

Mixture Growers Chemical Solutions (GMS)

Ingredients

Chemical Name	CAS Number	Proportion
Phosphoric Acid	7664-38-2	10-30%
Potassium Hydroxide	1310-58-3	10-30%
Diammonium Phosphate	7783-28-0	10-30%
Urea	57-13-6	10-30%
Water	7732-18-5	10-30%
Other Ingredients	Additional information is being withheld as a trade secret	

Section 4 – First-Aid Measures

Eye	Immediately flush with plenty of water for at least 15 minutes. If easy to do so, remove any contact lenses. If eye irritation persists or develops, get medical attention.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If difficulty breathing, give oxygen. If irritation persists or develops, get medical attention.
Ingestion	Do not induce vomiting. Drink large amounts of water (or milk, if available) to dilute the mixture. If irritation persists or develops, get medical attention.
Skin	Immediately wash with plenty of water. Remove contaminated clothing and shoes. If irritation persists or develops, get medical attention.
Typical Symptoms	Irritation to eyes, breathing, and ingestion.

Section 5 – Fire-fighting Measures

Suitable Extinguishing Media	Mixture is nonflammable; use agent most suitable for surrounding fire.
Unsuitable Extinguishing Media	No information available.
Unusual Hazards	Hazard can occur when mixture is exposed to extreme heat. At this time, mineral oxides are released from thermal decomposition, and hydrogen from reactions with minerals.
Personal Protective Equipment and Precautions	Keep personnel removed from and upwind of fire. Wear full fire-fighting turnout gear (full Bunker gear) and respiratory protection (SCBA). Cool containers containing GMS with water spray to prevent rupture.

Section 6 – Accidental Release Measures

Small Spill	Wear appropriate personal protection equipment. Adequate ventilation is required. No smoking in spill area. Absorb material with an inert material (sand, vermiculite, diatomaceous earth, or other absorbent material), then place content in a chemical waste container. Container should be disposed at an appropriate waste facility according to current applicable laws, regulations, and product characteristics at time of disposal.
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Large Spill	Wear appropriate personal protection equipment. Adequate ventilation is required. No smoking in spill area. Contain spill with dikes, then transfer the material to appropriate containers for reclamation, or disposal. Treat remaining as <i>Small Spill</i> described above.
Release Notes	<p>If spill could potentially enter any waterway, including intermittent dry creeks:</p> <ul style="list-style-type: none"> - Contact the local authorities - If in USA, report to US Coast Guard National Response Center (800-424-8802) <p>In case of accident, or road spill: contact CHEMTREC (800-424-9300)</p>
Comments	See Section 13 for disposal information, and Section 15 for regulatory requirements. Large and small spills may have a different definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

Section 7 – Handling and Storage

Handling	Use appropriate personal protective equipment as specified in Section 8. Avoid contact with eyes, inhalation, and ingestion. Use with adequate ventilation. Do not eat, drink, or smoke in work areas.
Storage	Store in closed container, in a cool, well ventilated area, and away from potential sources of heat or fire. Use with adequate ventilation. Do not eat, drink, or smoke in storage areas.

Section 8 – Expose Control

Engineering Controls	Good ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Personal Protection	
Eyes	When spraying or splashing, wear chemical resistant goggles and face shield (ANSI Z87.1 or approved equivalent).
Clothing	When contact is likely, wear chemical resistant gloves, a chemical resistant suit, and rubber boots.
Respiratory	When vapor or mist exceeds applicable concentration limits, wear NIOSH approved respiratory protective mask.

Section 9 – Physical and Chemical Properties

Appearance	Clear viscous liquid
Upper/Lower Flammability Limits	Not applicable
Upper/Lower Explosive Limits	Not applicable
Odor	Slight ammonia odor in confined area
Vapor Pressure	Slightly less than water
Odor Threshold	Not applicable
Vapor Density	Slightly less than water
pH at 20°C	7.2 - 7.4
Relative Density	1.36 gm/ml
Melting Point	Will vaporize around 107°C
Freezing Point	-7°C to -3°C
Solubility	High solubility in H ₂ O
Initial Boiling Point	102°C
Flash Point	Nonflammable
Evaporation Rate	Slightly less than water
Flammability	Nonflammable
Partition Coefficient	Not available
Auto Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Slightly higher than water

Section 10 – Stability and Reactivity

Stability	Mixture is stable when following correct handling and storage conditions described in Section 7.
Reactivity	Copper, brass, and bronze
Other	
Conditions to Avoid	High Temperatures
Incompatible Materials	Copper, brass, and bronze
Decomposition Products	Boiling can lead to irritating gas release

Section 11 – Toxicological Information

Routes of Exposure	Inhalation, ingestion, skin, and eye contact
Symptoms of Exposure	Delayed, immediate, or chronic effects from long or short-term exposure may include nausea, vomiting, and eye irritation
Measure of Toxicity	Not Applicable
Carcinogenic Effects:	No data available on product itself. GMS is not listed in the National Toxicology Program (NTP) Report on carcinogenic, has not been found to be a potential carcinogenic in the International Agency of Research on Cancer (IARC) Monographs, nor has it been found to be a potential carcinogen by OSHA

Section 12 – Ecological Information

Mobility	No data available
Bioaccumulation Potential	No data available
Eco-toxicity Effects	No data available
Aquatic Toxicity	Little to no known long-term adverse effects in the aquatic environment
Persistence and Degradability	No data available

Section 13 – Recommended Disposal

Waste from Residues/Unused Product	Waste disposal must be in accordance with appropriate federal, state, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Use proper personal protection equipment when handling material (see Section 8).
Contaminated Packaging	Do not re-use empty containers without adequate cleaning.

Section 14 – Transportation Information

	U.S. DOT	TDG - Canada
Proper Shipping Name	Growers Mineral Solutions	Growers Mineral Solutions
Transport Hazard Class	Non Hazardous	Non Hazardous
Packing Group	Not Applicable	Not Applicable
UN Number	Not Listed	
Marine Pollutant	Not Listed	
Severe Marine Pollutant	Not Listed	
Special Precautions	Not Listed	

Section 15 – Regulatory Information

U.S. Regulations

California Proposition 65	Not Listed
CERCLA/SARA Section 302 Extremely Haz.	Not Listed
Connecticut Hazardous Air Pollutants	Not Listed
Florida Substance List	Not Listed
IARC	None
Illinois Toxic Air Contaminants	Not Listed
Massachusetts Right to Know List	Not Listed
New Jersey Right to Know List	Not Listed
NTP	None
Pennsylvania Right to Know List	Not Listed
Rhode Island Right to Know List	Not Listed
SARA 313 Emission Reporting/Toxic Release of Chemicals	Not Listed

International Inventories

TSCA	Not Listed
AICS	Not Listed
Canada DSL Inventory	Not Listed
EU EINECS List	Not Listed
IECSC	Not Listed
Korea KECL	Not Listed
Philippines PICCS	Not Listed

313 SARA Notification The above is your notification as to the SRA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 424-9346 or (703) 348-5070 (in Washington, DC or Alaska).

State Notification The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

Section 16 – Other Information

NFPA Hazard Ratings	<i>0 = Insignificant</i>	<i>1 = Slight</i>	<i>2 = Moderate</i>	<i>3 = High</i>	<i>4 = Extreme</i>
	Health: 1	Flammability: 0	Instability: 0	Special Hazards: 0	

Section(s) Changed Since Last Revision 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

Disclaimer

All information contained in the Safety Data Sheets and the health, safety and environmental information are considered to be accurate to the best of our knowledge. However, no warranty or representation, expressed, or implied, is made as to the accuracy or completeness of the data and information contained in this data sheet. Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this safely and to comply with all applicable laws and regulations. Growers Mineral Corp. accepts no responsibility for any injury, loss or damage, resulting from improper or abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.

October 2020 Revision: Updated Manufacturer Name to Growers Mineral Corp.