SAFETY DATA SHEET		
Dyna Gro Magnesium 6.3	Date Prepared: 12/9/2013	Replaces: All Previous

SECTION 1. IDENTIFICATION

Product Name:	Dyna Gro Magnesium 6.3
Synonyms:	Magnesium Nitrate Solution, GROMG63
Use:	Agricultural, Liquid Micronutrient Fertilizer
Manufacturer:	Chemical Dynamics, Inc.
	4206 Business Lane
	Plant City FL 33566
Phone:	813-752-4950
Chemtrec (Emergency) Phone:	800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Pictogram	Signal Word	Hazard Class	Hazard Category	Hazard Statement
	**WARNING**	Skin Irritation Eye Irritation STOT: Single Exposure	Cat 2 Cat 2B Cat 3	Causes skin and eye irritation May cause respiratory Irritation

Precautionary Statements:	**Prevention:** Avoid breathing mists or sprays. Use only outdoors or in a well-ventilated area. Wash exposed areas thoroughly after use. Wear chemical splash proof goggles, face protection and protective gloves. **Response**: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: get medical attention. If on skin: Wash with plenty of water. If skin irritation occurs, get medical attention. **Storage**: Store in a well-ventilated place. Keep container tightly closed. Store locked up **Disposal**: Dispose of contents/containers in accordance with local/regional/national regulations (See Section 13 of SDS). Containers may be triple rinsed and offered for recycling.

SECTION 3. COMPOSITION

Material	CAS #	EINECS #	%WT
Magnesium Nitrate Hexahydrate	13446-18-9	233-826-7	66-67%
Water	7732-18-5	231-791-2	balance

See product label for guaranteed analysis.

SECTION 4. FIRST AID MEASURES	
Ingestion:	Rinse mouth. Do NOT induce vomiting. Drink large amounts of water. Never give anything by mouth to an unconscious person. Seek medical attention.
Skin Contact:	Take of all contaminated clothing. Rinse skin with soap and water for at least 15 minutes. Seek medical attention if irritation persists. Wash contaminated clothing before reuse.
Inhalation:	Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Be observant for signs of pulmonary edema if overexposed. Seek prompt medical attention.
Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: get medical attention.
Acute Exposure Symptoms:	Moderate irritant of eyes, skin and contaminated tissue. Prolonged contact can result in tissue damage which could lead to blindness. Ingestion can be harmful or fatal.
Chronic Exposure Symptoms:	Prolonged skin contact may result in dermatitis (inflammation and redness of skin). Repeated ingestion of small amounts may cause weakness, depression, headaches, neurological effects and mental impairment.

SECTION 5. FIRE FIGHTING MEASURES	
Extinguishing Media:	Water spray is recommended. Halon, foam, dry chemical, CO2 or any ABC class extinguisher are acceptable. Use extinguishing agent most appropriate to surrounding materials. Cool containers with water spray to avoid rupture due to thermal expansion.
Specific Hazards:	This product is an aqueous mixture which will not burn. Under fire conditions, this product behaves as an oxidizer if evaporated to dryness. Contact with oxidizable substances may result in ignition. Violent combustion or explosion when involved in fire can occur. In a fire this material may decompose and produce acrid vapors, magnesium compounds and oxides of nitrogen.
Protective Equipment and Precautions for Fire-Fighters:	Wear self-contained breathing apparatus (SCBA) and full protective gear. Avoid inhaling combustion products. Fire run-off should be contained to prevent possible environmental damage.
NFPA Rating:	Health: 1, Fire: 0, Reactivity: 0

SECTION 6. ACCIDENTAL RELEASE MEASURES	
Precautions:	Isolate area. Keep unnecessary personnel away. Avoid splashing or spraying.
Protective Equipment:	Impervious gloves (rubber, neoprene or nitrile), Long sleeved clothing. Side-shielded safety glasses or chemical splash-proof goggles, face shield Chemical resistant apron and/or rubber boots may be needed.
Containment:	Stop flow of material if safe to do so. Dike area with diatomaceous earth or sand and maximize recovery. Do not absorb in saw dust.
Clean Up:	Pump into a suitable tank or absorb with diatomaceous earth or sand. Sweep up and place into suitable containers for agronomical land application at recommended rates or dispose of in accordance with local/regional/national regulations (See Section 13 of SDS).

SECTION 7. HANDLING AND STORAGE	
Precautions for safe handling:	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Do not eat, drink or use tobacco products when handling this material. Apply product in open areas. Keep away from children and pets. Do not contaminate feed, seed or any water sources. Launder work clothes frequently and separate from other laundry.
Conditions for safe storage:	Store in a well-ventilated, cool, dry place, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Keep containers tightly closed when not in use. Do not let product go below 32°F. Store locked up. Do not store on wooden floors. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged.
Incompatibilities:	Flammable and combustible materials, strong reducing agents (such as ammonium hydroxide), finely powdered metals. Keep away from intense heat or fire.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION			
Component Exposure Limits:	Magnesium Nitrate Hexahydrate $Mg(NO_3)_2 \bullet 6H_2O$	Not Established	PEL, OSHA
		Not Established	TWA, ACGIH
		Not Established	IDLH, NIOSH
		Not Established	REL, NIOSH
		Not Established	STEL, NIOSH
Engineering Controls:	Provide local exhaust ventilation and wash facilities.		
Personal Protective Equipment:	Eyes: Side-shielded safety glasses or chemical splash-proof goggles (where splashing is possible) Skin: Impervious gloves (rubber, neoprene or nitrile), long sleeved clothing. Chemically resistant apron is recommended. Respiratory: None required for ambient air concentrations (i.e. in the open under normal agronomic conditions) not exceeding occupational exposure limits. Respiratory protection may be required in the event of a spill in an enclosed area. Use a NIOSH/MSHA approved SCBA with full face piece operated in a positive pressure mode.		
General:	Eye wash stations and safety shower required.		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES			
Appearance:	Clear, colorless Liquid		
Odor:	Odorless	**UEL / LEL:**	Not Applicable
Odor Threshold:	Not Applicable	**Vapor Pressure:**	Similar to water
pH:	2.8 to 4.0	**Density:**	1.35 to 1.37 g/cm^3
Melting/Freezing Point:	< 0°C (32°F)	**Solubility:**	Water
Boiling Point:	> 100°C (>212°F)	**Log_{ow}:**	Not Available
Flash Point:	Not Applicable	**Auto Ignition Temp:**	Not Applicable
Evaporation Rate:	Similar to water	**Decomposition Temp:**	Not Available
Flammability (Solid/Gas):	Not Applicable	**Viscosity**	Not Available

SECTION 10. STABILITY AND REACTIVITY	
Reactivity:	Product may act as an oxidizer, particularly if evaporated to dryness
Chemical Stability:	Stable under normal conditions
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
Conditions to avoid:	Avoid exposure to extreme temperatures, contact with incompatible chemicals and all contact with combustible materials. Elevated temperatures may cause containers to rupture.
Incompatible Materials:	Flammable and combustible materials, strong reducing agents (such as ammonium hydroxide), finely powdered metals.
Hazardous Decomposition Products:	Magnesium compounds and nitrogen oxides.

SECTION 11. TOXILOGICAL INFORMATION	
Acute Toxicity:	LD50 oral (rat): 5440 mg/kg (100% basis) 8242 mg/kg (as product) Probable oral lethal dose in humans is 0.5-5.0 g/kg bw (100% basis)
Likely Routes of Exposure:	Inhalation, ingestion or skin absorption
Symptoms and Signs of Exposure:	Eyes: Causes mild irritation. May result in redness, tearing and blurred vision. Skin: Causes mild irritation to the skin. May result in redness, itching and pain. Ingestion will immediately irritate or burn throat. Symptoms include nausea, abdominal pain, vomiting and diarrhea. Severe overexposure can result in convulsions and collapse. Symptoms occur upon contact and include irritation of mouth, throat and esophagus. Severe ingestion exposures can be fatal. The nitrate component may reduce the bloods ability to transport oxygen causing headache, fatigue, dizziness and blue lips and skin (methemoglobinemia). Symptoms may be delayed. Inhalation of mist may irritate or burn nose, throat and lungs. Coughing, nausea, headaches and weakness are possible.
Chronic Effects:	Prolonged skin contact may result in dermatitis (inflammation and redness of skin). Repeated ingestion of small amounts may cause weakness, depression, headaches, neurological effects and mental impairment.
Carcinogenetic:	None of this product's components are listed by ACGIH, OSHA, NIOSH or NTP as carcinogenic. IARC: 2A Probably carcinogenic to humans (Nitrates (ingested) under conditions that result in endogenous nitrosation)
Mutagenicity:	Not Available
Reproductive Toxicity:	Not Available

SECTION 12. ECOLOGICAL INFORMATION	
Ecotoxicity:	In high concentrations, this product may be harmful to both terrestrial and aquatic plant or animal life.
Other Adverse Effects:	Not harmful to ozone layer
Ecotoxicity:	Not Available

SECTION 13. DISPOSAL CONSIDERATIONS	
General Information:	As packaged, this product is a D001 ignitable waste per 40 CFR 261; applicable to wastes containing this product.
Disposal Instructions:	Agronomical land application at recommended rates or dispose of in accordance with local/regional/national regulations.

SECTION 14. TRANSPORT INFORMATION	
This material is not hazardous as defined by 49 CFR 172.101 by the US Department of Transportation	
Proper Shipping Name:	Not Applicable
Hazard Class:	Not Applicable
UN Identification #:	Not Applicable
Packing Group:	Not Applicable
Required Label(s):	Not Applicable
Emergency Response Guide Number:	Not Applicable
Marine Pollutant:	No

SECTION 15. REGULATORY INFORMATION	
TSCA Inventory Status	All intentional ingredients listed on the TSCA inventory.
DSCL (EEC) Status	All intentional ingredients listed on the DSCL inventory.
United States – SARA Hazard Category:	This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act (SARA) and is considered, under applicable definitions, to meet the following categories: Fire – No, Pressure – No, Acute – Yes, Chronic – No, Reactive – No
SARA Title III Information:	This product contains the following substances subject to the reporting requirements of Title III (EPCRA) of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
Magnesium Nitrate Hexahydrate CAS No. 13446-18-9	CERCLA RQ (pounds): No SARA Reporting, 302: No SARA Reporting, 304: No SARA Reporting, 313: Yes, 1.0% de minimus concentration (N511, Water Dissociable Nitrate)
Federal Insecticide, Fungicide, and Rodenticide Act	This product is not a pesticide.

State Regulations:	Other state regulations may apply. Check individual state requirements.
Magnesium Nitrate Hexahydrate CAS No. 13446-18-9	Appears on one or more of the following state hazardous substance lists: NJ

SECTION 16. OTHER INFORMATION

Date of Revision:	12/9/2013, revision prepared in accordance with 29 CFR 1910.1200 Appendix D to meet Global Harmonization Standards.
Disclaimer:	The information contained in this SDS refers only to the specific material designated and does not relate to any process or use with any other materials. This information is based on data believed to be accurate and reliable as of the date hereof. It is intended for use by persons possessing technical knowledge at their own discretion and risk. Because safety standards and regulations are subject to change and because Chemical Dynamics, Inc. has no continuing control over the material, those handling, storing or using the material should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that the same is done in accordance with federal, state and local law. No warranty, expressed or implied, and no liability is assumed by Chemical Dynamics, Inc. in conjunction with the use of this information. Nothing herein is to be construed as a recommendation to infringe any patents.