

SAFETY DATA SHEET

Dyna Green Calcium 6%

Date Prepared: 10/13/2014

Replaces: All Previous

SECTION 1. IDENTIFICATION

Product Name: Dyna Green Calcium 6%
Synonyms: Calcium Lignosulfonate solution, GRECA
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			
		Eye Irritation	Cat 2A	Causes serious eye irritation
Precautionary Statements:	Prevention: Wash thoroughly after handling. Wear protective gloves, eye protection, and face protection. Response: <u>If on skin (or hair):</u> Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. <u>If in eyes:</u> 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. Storage: Keep container tightly closed. Disposal: Dispose of contents/containers in accordance with local/regional/national regulations (See Section 13 of SDS).			

SECTION 3. COMPOSITION

Material	CAS #	EINECS #	%WT
Calcium Lignosulfonate	8061-52-7	Exempt polymer	6 %Ca
Water	7732-18-5	231-791-2	balance

See product label for guaranteed analysis.

SECTION 4. FIRST AID MEASURES	
General:	Note to physician. Treat symptomatically. In case of persistent, adverse effects, seek medical attention
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:	If on skin (or hair): Take off all contaminated clothing. Rinse skin with soap and water for at least 15 minutes.
Inhalation:	If inhaled: Remove person to fresh air and keep comfortable for breathing. Provide artificial respiration if necessary. Seek medical attention if necessary.
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).

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. In a fire this material may decompose and produce acrid vapors, calcium compounds and oxides of sulfur.
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. Chemical splash-proof goggles. 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. Do not let product go below 45°F. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Slightly corrosive to aluminum, zinc, and copper. Non-corrosive to steel, or stainless steel (304 or 316).
Incompatibilities:	Strong reducing and oxidizing agents. Store away from acids. Keep away from intense heat or fire.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION			
Component Exposure Limits:	All materials in proprietary Calcium Lignosulfonate blend	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:	<u>Eyes:</u> Chemical splash-proof goggles (where splashing is possible) <u>Skin:</u> Impervious gloves (rubber, neoprene or nitrile), long sleeved clothing. Chemically resistant apron is recommended. <u>Respiratory:</u> 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:	Dark, Opaque liquid		
Odor:	Sweet, woody odor	UEL / LEL:	Not Applicable
Odor Threshold:	Not Applicable	Vapor Pressure:	Similar to water
pH:	5.5 to 8.5	Density:	1.27 to 1.29 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:	Stable
Chemical Stability:	Stable under normal conditions
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
Conditions to avoid:	Avoid exposure to extreme temperatures and contact with incompatible chemicals. Elevated temperatures may cause containers to rupture.
Incompatible Materials:	Strong reducing and strong oxidizing agents, water reactive materials. Can cause pitting of and corrosion to some grades of stainless steel and, under high temperature and stress conditions can promote stress corrosion cracking
Hazardous Decomposition Products:	Calcium compounds and sulfur oxides and carbon.

SECTION 11. TOXICOLOGICAL INFORMATION	
Acute Toxicity:	LD50 oral (rat): >2000 mg/kg
Likely Routes of Exposure:	Inhalation, ingestion or skin absorption
Symptoms and Signs of Exposure:	<u>Eyes</u> : May cause mild irritation. May result in redness, tearing and blurred vision. <u>Skin</u> : May cause mild irritation to the skin. May result in redness, itching and pain. <u>Ingestion</u> : May cause digestive tract irritation, with accompanying nausea, vomiting and diarrhea. <u>Inhalation</u> 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).
Carcinogenic:	None of this product's components are listed by ACGIH, OSHA, NIOSH or NTP as carcinogenic.
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, but for analogous calcium salt: LC50 Daphnia hyalina (Water Flea): 1838 mg/L Freshwater, Static LC50 Gambusia affinis (Western Mosquitofish): 13,400 g/L Freshwater, Static

SECTION 13. DISPOSAL CONSIDERATIONS	
General Information:	None
Disposal Instructions:	Agronomical land application at recommended rates or dispose of in accordance with local/regional/national regulations. Containers may be triple rinsed and offered for recycling.

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:
Calcium Lignosulfonate:	CERCLA RQ (pounds): No SARA Reporting, 302: No SARA Reporting, 304: No SARA Reporting, 313: No
Federal Insecticide, Fungicide, and Rodenticide Act	This product is not a pesticide.
State Regulations:	Other state regulations may apply. Check individual state requirements.

SECTION 16. OTHER INFORMATION

Date of Revision:	10/13/2014, 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.