SAFETY DATA SHEET

Dyna Green Organics Copper | Date Prepared: 10/13/2014 | Replaces: All Previous

SECTION 1. IDENTIFICATION

Product Name:	Dyna Green Organics Copper
Synonyms:	GRECU
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

Product is not classified as hazardous under normal conditions.

SECTION 3. COMPOSITION

Material	CAS #	EINECS #	%WT
Copper Lignosulfonate	61827-83-6	Not Assigned	Proprietary Blend of materials
Water	7732-18-5	231-791-2	not classified as hazardous

See product label for guaranteed analysis.

SECTION 4. FIRST AID MEASURES

General:	In case of persisting adverse effects consult a physician. Treat symptomatically.
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:	May cause slight, transient irritation of eyes and skin. Ingestion can be irritating to the gastrointestinal tract.
Chronic Exposure Symptoms:	Prolonged skin contact may result in dermatitis (inflammation and redness of skin).

SECTION 5. FIRE FIGHTING MEASURES	
Extinguishing Media:	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, copper 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. Prevent run off to storm sewers and ditches leading to natural waterways.
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 42°F. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged.
Incompatibilities:	Water reactive materials, strong oxidizing or reducing agents.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION			
Component Exposure Limits:	Copper Lignosulfonate	1 mg/m^3	PEL, OSHA (Cu dust/mist)
		1 mg/m^3	TWA, ACGIH (Cu dust/mist)
		100 mg/m^3	IDLH, NIOSH (Cu dust/mist)
		1 mg/m^3	REL, NIOSH (Cu dust/mist)
		Not Established	STEL, NIOSH
Engineering Controls:	Provide local exhaust ventilation and wash facilities.		
Personal Protective Equipment:	Eyes: 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 recommended.		

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:	4.0 to 5.0	**Density:**	1.16 to 1.17 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, contact with incompatible chemicals. Elevated temperatures may cause containers to rupture.
Incompatible Materials:	Water reactive materials, strong oxidizing agents or strong reducing agents
Hazardous Decomposition Products:	Copper compounds, sulfur oxides and carbon.

SECTION 11. TOXILOGICAL INFORMATION	
Acute Toxicity:	LD50 oral (rat): >2000 mg/kg
Likely Routes of Exposure:	Inhalation, ingestion or skin absorption
Symptoms and Signs of Exposure:	Eyes: May cause mild irritation. May result in redness, tearing and blurred vision. Skin: Ma cause mild irritation to the skin. May result in redness, itching and pain. Ingestion: May cause digestive tract irritation, with accompanying nausea, vomiting and diarrhea. Inhalation of mist may irritate or burn nose, throat and lungs. Coughing, nausea, headaches and weakness are possible.
Chronic Effects:	Not Available
Carcinogenetic:	None of this product's components are listed by IARC, ACGIH, OSHA, NIOSH or NTP as carcinogenic.
Mutagenicity:	Not Available
Reproductive Toxicity:	Not Available

SECTION 12. ECOLOGICAL INFORMATION	
Ecotoxicity:	Do not reuse container. 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. However, copper compounds are generally considered toxic to aquatic organism. Water soluble copper(II) compounds can have LC50 values less than 1 mg/L over 96 hours for Oncorhynchus mykiss and Daphnia Magna

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. Do not reuse containers. 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:	Yes (Copper Compounds)

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 – No, 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:
Copper Lignosulfonate	CERCLA RQ (pounds): No RQ is assigned to this generic or broad class, (Copper compounds) although the class is a CERCLA hazardous substance. See 50 Federal Register 13456 (April 4, 1985). SARA Reporting, 302: No SARA Reporting, 304: No SARA Reporting, 313: Yes, 1.0% de minimus concentration (N100, Copper Compounds)
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.