

SAFETY DATA SHEET

Dyna Flo Pre Plant

Date Prepared: 6/18/2014

Replaces: All Previous

SECTION 1. IDENTIFICATION

Product Name: Dyna Flo Pre Plant
Synonyms: FLOPREPL
Use: Agricultural, A proprietary blend of naturally occurring, non-pathogenic, non-genetically altered beneficial soil microorganisms on an inert natural carrier or in a liquid form
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
Microbial Ingredients	n/a	n/a	1%
<i>Bacillus subtilis</i>	n/a	n/a	1x10 ⁷ cfu/ml
<i>Bacillus methylotrophicus</i>	n/a	n/a	1x10 ⁷ cfu/ml
<i>Bacillus amyloliquefaciens</i>	n/a	n/a	1x10 ⁷ cfu/ml
Water	7732-18-5	231-791-2	balance

See product label for guaranteed analysis

SECTION 4. FIRST AID MEASURES

General:	In case of persisting adverse effects consult a physician. Treat symptomatically.
Ingestion:	Drink large amounts of water. Do not induce vomiting. Call doctor or poison control center.
Skin Contact:	If on skin (or hair): Take off all contaminated clothing and wash exposed skin with soap and water. If irritation persists, seek medical attention.
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:	Not available. Bacillus species are non-pathogenic.
Chronic Exposure Symptoms:	Not available

SECTION 5. FIRE FIGHTING MEASURES	
Extinguishing Media:	Not Flammable. Use extinguishing media appropriate to surrounding fire. Cool containers with water spray from a distance to avoid rupture from thermal expansion.
Specific Hazards:	This product is an aqueous mixture which will not burn.
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: 0, 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, face shield Chemical resistant apron and/or rubber boots may be needed. Clothing and equipment can be washed or laundered for reuse.
Containment:	Stop flow of material if safe to do so. Dike area with diatomaceous earth or sand and maximize recovery. Avoid infiltration of large quantities into drains, surface water, groundwater and soil.
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 and bacterial protocols (See Section 13 of SDS).

SECTION 7. HANDLING AND STORAGE	
Precautions for safe handling:	Material has low toxicity; therefore risk of damage is limited in normal handling. Normal handling or minor release is not expected to be hazardous. 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 original container. Store in a well-ventilated, cool, dry place, away from direct sunlight and sources of intense heat (40°F to 110°F). Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged.
Incompatibilities:	Strong acid & alkali, organic solvents and oxidizing agents, excessive heat

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION			
Component Exposure Limits:	Bacillus Species in product	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 or drift 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). Use NIOSH approved respirator when drift, dusts, mists, or vapors are present.		
General:	Eye wash stations and safety shower recommended.		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES			
Appearance:	Clear to tan and hazy liquid		
Odor:	Fermentation odor	UEL / LEL:	Not Applicable
Odor Threshold:	Not Available	Vapor Pressure:	Similar to water
pH:	4 to 7	Density:	1.0 to 1.01
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:	Not Available	Decomposition Temp:	Not Available
Flammability (Solid/Gas):	Not Applicable	Viscosity	Not Available

SECTION 10. STABILITY AND REACTIVITY	
Reactivity:	Low (water based)
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 materials. Elevated temperatures may cause containers to rupture.
Incompatible Materials:	Strong acid & alkali, organic solvents and oxidizing agents
Hazardous Decomposition Products:	None.

SECTION 11. TOXICOLOGICAL INFORMATION	
Acute Toxicity:	Oral LD50: Not Available
Likely Routes of Exposure:	Contact with eyes
Symptoms and Signs of Exposure:	<u>Eyes:</u> May cause slight, transient irritation <u>Skin:</u> May cause slight, transient irritation. Not expected to be absorbed through skin. <u>Inhalation:</u> At room temperature, exposures to vapors are unlikely due to physical properties. <u>Ingestion:</u> Amounts ingested, incidental to industrial handling, are not expected to cause injury. Bacillus species in this product are non-pathogenic
Chronic Effects:	Not Available
Carcinogenic:	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:	This product is bio-degradable. Dispose of this product by diluting it with water and apply to soil, plants, turf, etc. Bacillus species in product are naturally occurring, non-GMO, non-pathogenic soil microorganisms.
Other Adverse Effects:	Not harmful to ozone layer
Ecotoxicity:	Not Available

SECTION 13. DISPOSAL CONSIDERATIONS	
Disposal Instructions:	Agronomical land application at recommended rates or dispose of in accordance with local/regional/national bacterial protocols.

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:	No chemicals in this material have hazard classifications under SARA Title III, Sec 311 and 312
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:
All Components in product:	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:	6/18/2014, revision prepared in accordance with 29 CFR 1910.1200 Appendix D to meet Global Harmonization Standards.
Notes:	At temperatures under 65°F (18°C), this product may begin to crystallize. Crystals can be dissolved by reheating product.
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.