

SAFETY DATA SHEET

Dyna Flo 0-0-15

Date Prepared: 12/17/2013

Replaces: All Previous

SECTION 1. IDENTIFICATION

Product Name: Dyna Flo 0-0-15
Product Synonyms: Potassium Chloride Solution, Muriate of Potash, NPK0015
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
Potassium Chloride	7447-40-7	231-211-8	Proprietary
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:	Rinse mouth. Drink large amounts of water. Never give anything by mouth to an unconscious person. Ingestion of potash will usually cause purging of the stomach by vomiting. Do NOT induce vomiting. Obtain medical attention.
Skin Contact:	Remove contaminated clothing. Wash with soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention for any breathing difficulty.
Eye Contact:	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Acute Exposure Symptoms:	Irritation to respiratory tract. Redness or irritation to skin and eyes. Gastrointestinal disturbances such as abdominal cramps and vomiting. Ingestion of large amounts may cause cardiac arrhythmia or circulatory failure.
Chronic Exposure Symptoms:	Not available

SECTION 5. FIRE FIGHTING MEASURES	
Extinguishing Media:	Not Flammable Use extinguishing media appropriate to surrounding fire.
Specific Hazards:	When subjected to extremely high temperatures, it may release small amounts of chlorine gas.
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.
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 where freezing is possible. Keep containers tightly closed when not in use. Do not let product go below 35°F. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Avoid contact with aluminum or carbon steel to minimize corrosion.
Incompatibilities:	Water reactive materials

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION			
Component Exposure Limits:	Potassium Chloride KCl	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>: Side-shielded safety glasses or 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:	Clear, colorless Liquid		
Odor:	Odorless	UEL / LEL:	Not Applicable
Odor Threshold:	Not Applicable	Vapor Pressure:	Similar to water
pH:	5.5 to 8.5	Density:	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:	Elevated temperatures may cause containers to rupture.
Incompatible Materials:	Contact with strong acid may produce hydrogen chloride gas. Contact with hot nitric acid may produce toxic nitrosyl chloride.
Hazardous Decomposition Products:	None

SECTION 11. TOXICOLOGICAL INFORMATION	
Acute Toxicity:	LD50 oral (rat): 2,600 mg/kg (as dry material) 10,441 mg/kg (as product) LD50 oral (Guinea pig): 2500 mg/kg (as dry material) 10,040 mg/kg (as product) PROBABLY ORAL LETHAL DOSE (HUMAN) 0.5-5 G/KG, BETWEEN 1 OZ AND 1 PINT (OR 1 LB) FOR 70 KG PERSON (150 LB).
Likely Routes of Exposure:	Inhalation, ingestion or skin absorption
Symptoms and Signs of Exposure:	<u>Eyes</u> : May result in redness, tearing and blurred vision. <u>Skin</u> : May result in irritation. <u>Ingestion</u> : Ingestion of large amounts may cause gastrointestinal disturbances, purging, cardiac arrhythmia or circulatory failure. <u>Inhalation</u> : May cause irritation to the respiratory tract.
Chronic Effects:	None known
Carcinogenetic:	None of this product's components are listed by ACGIH, OSHA, IARC, 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:	LC50 (24 hr) Daphnia magna (Water flea): 630 mg/L. Freshwater; static LC50 (48 hr) Daphnia magna (Water flea): 630 mg/L. Freshwater; static LC50 (24 hr) Pimephales promelas (Fathead minnow): 950 mg/L. Static LC50 (48 hr) Pimephales promelas (Fathead minnow): 910 mg/L. Static LC50 (96 hr) Pimephales promelas (Fathead minnow): 880 mg/L. 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.

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 – 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:
Potassium Chloride CAS No. 7447-40-7	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:	12/17/2013, 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.