

POLYDEX_MC MATERIAL SAFETY DATA SHEET

Section 1: Product Information

PCP Number:	27770
Product name:	<i>POLYDEX_MC Bacteriostatic Algaecide</i>
WHMIS code:	Not controlled product under the WHMIS code
Supplier/manufacturer:	EnvirEau Technologies, Inc. Suite 320 – 3771 Jacombs Road, Richmond, BC, V6V 2L9, Canada
Phone number:	(604) 270.2639 Fax: (604) 270.2689
Emergency phone number:	CANUTEC 613.996.6666
Product use:	Bacteriostat and algaecide to control algae and copper-sensitive bacteria in potable water.

Section 2: Composition / Information on Ingredients

Hazardous components (Specific chemical identity)	Proprietary Sulphuric acid based ion stabilizer ... 9.4% Copper as Elemental... 4.8% - 6.2% Present as copper ion (modified to increase ion stability)
--	--

Section 3: Hazard Identification

Emergency Overview	Caution-Poison. Keep out of reach of children. Avoid contact with skin, eyes and clothing. Avoid breathing spray mist or vapors. Causes irritation to eyes. May cause skin irritation. Harmful if swallowed or inhaled. This product is toxic to fish, aquatic invertebrates and some aquatic plants.
Potential Health Effects (see toxicological information)	Eyes: This product may cause eye irritation. Skin: Prolonged or repeated exposure may cause skin irritation. Ingestion: Swallowing this product may cause copper toxicity or sulfur allergies. Inhalation: Excessive exposure may cause irritation and/or allergies in the respiratory tract.

Section 4: First-Aid Measures

Eye:	Flush immediately with water for 15 minutes
Skin:	Wash with soap and water, remove and wash contaminated clothing
Inhalation:	Provide fresh air. Consult doctor if unwell.
Ingestion:	Treat as sulfur base.

Section 5: Fire and Explosion Hazard Data

Flammability: Yes/No	No
Condition of flammability:	Not applicable
Flash point (C/F) = method:	Not applicable
Upper flammable limit (% by volume):	Not applicable
Lower flammable limit (% by volume):	Not applicable
Auto-ignition temperature:	Not applicable
Extinguishing media:	Not applicable
Dioxide: N/A	Dry chemical: N/A Other: N/A
Hazardous combustion products:	Not applicable
Explosion data:	
Sensitivity to impact or static discharge	None

Section 6: Accidental Release Measures

Steps to be taken in the event of spill or release:	Notify applicable Government Authority if spill is significant. Contain spill. Prevent entry into water intakes, sewers and waterways. Avoid vapor created by heat. Flush with water into retaining area or container and dilute with water. Neutralize with sodium bicarbonate or lime.
--	--

Section 7: Handling and Storage

Special protection information:	Provide adequate ventilation
Respiratory protection:	Provide adequate ventilation
Protective clothing:	Wear rubber gloves
Eye protection:	Wear chemical resistant goggles
Other protective equipment:	Not required
Handling procedure & storage requirements:	Avoid storing in excessive heat; expansion of container may occur creating spillage. Do not freeze

Section 8: Special Handling and Storage Requirements

Precautions-Handling/Storing:	Store in covered area. Do not allow the product to freeze. Protect containment from physical damage. Store in well ventilated area. Use protective clothes, goggles and nitrile gloves. Wash hands after working with product.
--------------------------------------	---

Section 9: Physical and Chemical Properties

Appearance: (Physical state, & color)	Clear, blue liquid
Odor:	Odorless
Odor threshold concentration: (ppm)	Not applicable
Density/specific gravity: (H₂O = 1)	1.19
Vapor pressure at 20^o C: (mmHg)	0.1
Vapor density: (Air = 1)	1
Evaporation rate:	N/A
Boiling point: (C/F)	104 ^o C
Freezing point: (C/F)	0 ^o C
pH:	0.5
Coefficient of water/oil distribution:	N/A

Section 10: Stability and Reactivity

Chemical stability: (Yes/No)	Yes
Conditions of stability:	A very stable compound
Conditions of product reactivity:	Stabilizes aquo ionic Iron, Zinc, Magnesium, Manganese, Copper, Silver & other metals
Incompatibility (materials to avoid)	Avoid mixing with strong bases
Hazardous decomposition products:	Sulfuric fumes may be generated by thermal decomposition

Section 11: Toxicological Information in concentrate form

Acute Toxicity:	LD 50 (Oral, Rat) Category III LD 50 (Dermal, Rat) Category III
Vapor Inhalation	Irritation of mucous membranes, coughing, difficulty breathing
Skin Contact	Irritation, redness, lesions with extended exposure
Eye Contact	Inflammation of mucous membranes
Ingestion	Gastric pain, vomiting, diarrhea, drop in blood pressure, collapse, acidosis, after a latency period; death

Section 12: Ecological Information

Biological Degradation	Methods for determination not applicable to inorganic substances
High Toxicity for Aquatic Organisms	
Fish Toxicity	Salmon LC 50: 0.025 – 0.20 mg per litre/96 hours.
Daphnia Toxicity	Daphnia sp. LC 50: 0.08 mg per litre/96 hours
Algal Toxicity:	Sc. basilensis inhibitory concentration 0.20 mg per litre
Fungicidal effect	Do not allow to enter water, wastewater or soil except as allowed by local and national regulations.

Section 13: Disposal Considerations

Use for approved uses
Use as fertilizer
May be subject to local regulations
May be neutralized with sodium bicarbonate or lime

Section 14: Transportation and Regulatory Information

Transportation of Dangerous Good Act Classification Numbers	Primary: 3264; Subsidiary: 3010
Packing Group:	III
Product Shipping Name	Corrosive Liquid, Acidic, Inorganic, N.O.S.
Class	8
Marine Pollutant	Yes

Publishing date: July 15 th , 2004 END OF MSDS
--