PMC WATER SYSTEMS SERVICES INC.
124 CONNIE CRES. UNIT 9 CONCORD, ONTARIO.
TEL 905 669 8262, FAX 905 669 8252, EMAIL pmcwater@aol.com, www.pmcwatersystems.com

MATERIAL SAFETY DATA SHEET
C-3410

Protection Required

SECTION 1 - MATERIAL IDENTIFICATION AND USE

Manufacturer's Name	:	PMC Water Systems Services Inc.
Manufacturer's Address	:	124 Connie Crescent, Unit 9, Concord, ON L4K 1L7
Manufacture's Phone #	:	(905) 669-8262
24 Emergency Phone #	:	Canutec (613) 996-6666
Product Identifier	:	C-3410
Product Use	:	Water Treatment

SECTION 2 – COMPOSITION/INGREDIENTS OF MATERIAL

Ingredients	Concentration	CAS #	LD_{50}	LC_{50}
Aqueous solution of 2-Bromo-2-NitroPropane-1,3 - Diol	8 – 13%	52-51-7	3245 mg/kg (oral – rat)	No Data Available

SECTION 3 – HAZARDS IDENTIFICATION

Potential Health Effects	Signs and Symptoms of Short-Term (Acute) Exposure
Eyes	May cause irritation including stinging or burning.
Skin	May cause irritation with contact.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Harmful if swallowed.

SECTION 4 – FIRST AID MEASURES

Eye Contact	Immediately irrigate with water for at least 10 minutes and obtain medical attention.
Skin Contact	Remove contaminated clothing. Swab affected skin with water or soap and water. If irritation develops, obtain medical attention.
Inhalation	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention if difficulties persist.
Ingestion	If swallowed, wash out mouth thoroughly with water; give water to drink. Obtain medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

Flammability	Maximum temperature of 90°C recommended to avoid risk of self heating and rapid decomposition. NOTE: Mixing of this substance with other substances may influence thermal instability.
Flash Point	Not Available
Autoignition Temperature	Not Available
Means of Extinction	Water spray, foam, carbon dioxide and dry chemical powder are suitable extinguishing agents.
Special Firefighting Procedures/Equipment	BNPD (100%) will burn in air producing toxic gases. Self-contained breathing apparatus should be provided for firemen fighting fires in confined spaces.
Hazardous Combustion Products	Hydrogen bromide and oxides of nitrogen
HMIS Ratings	Health 1, Flammability 0, Reactivity 0

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear appropriate personal protective equipment if required. Ventilate area.
Environment Precautions	Prevent spilled product from entering enter drains, sewers, waterways or confined spaces.
Spill Response/Cleanup	Immediately contain with physical barriers and/or absorbents and remove the spillage. Clean the area with detergent and water.

SECTION 7 – HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Where there is a risk of personal contact, protective clothing including goggles and gloves must be worn.
Storage Requirements	Store below 25°C away from oxidizing materials, heat and sources of ignition and food, drink and animal feeding stuffs. Avoid contact with metals. Avoid freezing

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation	Occupational Exposure Limits: in-house workplace exposure level is 5 mg/m³. Ensure good general and local ventilation.
Respiratory Protection	Use an approved respirator with appropriate dust/mist cartridges.
Skin Protection	Where there is a risk of personal contact, protective clothing including goggles and gloves must be worn.
Eye/Face Protection	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled.
Other Comments	An eyewash station and safety shower should be available

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Liquid
Odour and Appearance	:	Faint characteristic odour; colourless to pale yellow liquid
Odour Threshold	:	Not Available
Specific Gravity (Water = 1)	:	1.09
Vapour Pressure (mmHg)	:	Not available
Vapour Density (Air = 1)	:	Not available
Evaporation Rate	:	Not available
Boiling Point	:	100°C, 212°F
Freezing/Boiling Point	:	About 0°C
pH	:	Not greater than 7
Water/Oil Distribution Coefficient	:	Not available
Solubility in Water	:	Soluble

SECTION 10 – STABILITY AND REACTIVITY

Stability/Reactivity	Stable at normal temperatures, but when evaporated to dryness and the resulting solid BNPD heated above 140°C the solid decomposes exothermically liberating toxic hydrogen bromide and oxides of nitrogen and swelling up to give a sticky, tarry mass which burns readily in a fire. The decomposition temperature is significantly lowered in the presence of inorganic or organic bases to an extent proportional to the amount of base present.
Conditions for Instability	130°C decomposes. In the presence of base, the onset of decomposition occurs at lower temperatures.
Incompatible Materials	Aqueous solutions react with aluminum and, to some extent, with iron.
Hazardous Decomposition Products	Excessive heat and burning may release oxides of carbon and nitrogen
Hazardous Polymerization	Will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Entry		
Skin Contact	:	Causes mild skin irritation.
Eye Contact	:	Causes eye irritation.
Ingestion	:	Harmful if swallowed
Inhalation	:	Inhalation of mists may cause irritation or corrosion of mucous membranes and the lungs.
Chronic Exposure Effects	:	Repeated or prolonged skin contact may cause irritation and superficial burns.
Irritancy	:	Slightly irritating by inhalation or contact with skin and eyes.
Sensitization	:	Slightly irritating by inhalation or contact with skin and eyes.

Carcinogenicity	:	Not Available
Teratogenicity	:	Not Available
Mutagenicity	:	Not Available
Reproductive Effects	:	Not Available

SECTION 12 – ECOLOGICAL INFORMATION

General Comments No biodegradability or environmental effects data is available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Dispose in accordance with federal, provincial or local government requirements. Contact your local, provincial or federal environmental agency for specific regulations. Burn in a licensed incinerator fitted with an after burner and efficient scrubbing device or bury in a licensed landfill site, in accordance with local regulations and the Pollution Control Act. Empty containers should not be re-used, but disposed of as hazardous waste.

SECTION 14 – TRANSPORT INFORMATION

TDG Shipping Regulations Not TDG Regulated

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification Not WHMIS regulated
Domestic Substances List All ingredients are listed on the DSL or are not required to be listed.

SECTION 16 – OTHER INFORMATION

Prepared by:
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