



# PMC WATER SYSTEMS SERVICES INC.

## 124 CONNIE CRES. UNIT 9 CONCORD, ONTARIO.

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### MATERIAL SAFETY DATA SHEET W-5014

#### 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  
**Manufacturer's Phone #** : (905) 669-8262  
**24 Emergency Phone #** : Canutec (613) 996-6666  
**Product Identifier** : W-5014  
**Product Use** : Water Treatment

#### SECTION 2 – COMPOSITION/INGREDIENTS OF MATERIAL

Ingredients	Concentration	CAS #	LD <sub>50</sub>	LC <sub>50</sub>
Magnesium Hydroxide	40 – 70%	1309-42-8	8500 mg/kg (oral – rat)	No Data Available

#### SECTION 3 – HAZARDS IDENTIFICATION

**Overview** Low hazard for usual industrial or commercial handling. Product may cause mechanical irritation to skin and eyes. Can decompose at high temperatures forming toxic gases.

**Eyes** May cause irritation, redness and possible damage due to abrasiveness.

**Skin** This product may cause irritation, redness and possible damage due to abrasiveness. Prolonged, confined (especially under finger nails, rings or watch bands) or repeated exposure may cause skin irritation.

**Inhalation** Inhalation is not a likely route of exposure at normally encountered temperatures. Contact with mist or spray may cause irritation of mucous membranes, coughing and difficulty in breathing.

**Ingestion** This product may cause mild gastrointestinal discomfort. Large doses can have cathartic (laxative) effects.

**Other Health Effects** Irritancy effects on the skin and eyes may be delayed, and damage may occur without the sensation or onset of pain. May cause central nervous system (CNS) depression, which is characterized by headache, dizziness, drowsiness, nausea, vomiting and incoordination. Severe overexposures may lead to coma and possible death due to respiratory failure. Temperatures above 1 700 °C may cause metal fume fever. Metal fume fever can be caused by inhalation of fumes formed in the air from welding or heating the metal. Symptoms of metal fume fever occur about 4 to 12 hours after exposure and usually last about 24 hours. Recovery is complete with no apparent permanent disability. The symptoms resemble the "flu" and include: sweating, shivering, headache, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness and tiredness. A metallic or sweet taste in the mouth, dryness or irritation of the throat and coughing may occur at the time of exposure to the metal fumes. Some workers develop a short-term immunity so that repeated exposure to the fumes does not cause metal fume fever. This immunity is quickly lost after short absences from work (weekends or vacations).

#### SECTION 4 – FIRST AID MEASURES

**Eye Contact** Immediately flush eyes thoroughly for 15 minutes with running water. Hold eyelids open during flushing. If irritation persists, repeat flushing.

**Skin Contact** Start flushing while removing contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice.

**Inhalation** If respiratory problems arise, move the victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give CPR if there is no breathing AND no pulse. Obtain medical advice IMMEDIATELY.

**Ingestion** Do not attempt to give anything by mouth to an unconscious person. If victim is alert and not convulsing, rinse mouth out and give 1/2 to 1 glass of water to dilute material. DO NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. Obtain medical attention IMMEDIATELY.

**Notes to Physician** Treat symptomatically. Do not administer acidic agents to neutralize the alkali; this may cause an exothermic reaction and burn the esophagus. Do not perform gastric lavage or administer olive oil. Medical conditions that may be aggravated by exposure to this product include diseases of the skin, eyes or respiratory tract.

## SECTION 5 - FIRE FIGHTING MEASURES

<b>Flammability</b>	Non combustible. This material does not burn.
<b>Flash Point</b>	Non combustible
<b>Autoignition</b>	Not Applicable
<b>Temperature</b>	
<b>Means of Extinction</b>	Use media appropriate for surrounding fire and/or materials. Use carbon dioxide or dry chemical media for small fires. If only water is available, use it in the form of a fog. Do not direct a solid stream of foam into hot, burning pools. This may cause spattering and increase fire intensity. Closed containers exposed to heat may explode. Spilled material may cause floors and contact surfaces to become slippery.
<b>Special Firefighting Procedures/Equipment</b>	Isolate materials that are not involved in the fire and protect personnel. Cool containers with flooding quantities of water until well after the fire is out. Spilled material may cause floors and contact surfaces to become slippery. Use self-contained breathing apparatus and protective clothing.
<b>Hazardous Combustion Products</b>	Thermal decomposition products are toxic and may include oxides of magnesium.
<b>NFPA / HMIS Ratings</b>	Not Available

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Isolate area. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard on some surfaces. Use appropriate personal protective equipment.
<b>Environment precautions</b>	Prevent large spills from entering into soil, ditches, sewers, waterways and/or groundwater.
<b>Spill Response/Cleanup</b>	Avoid dry sweeping. Do not use compressed air to clean surfaces. Vacuuming or wet sweeping is preferred. Return all material possible to container for proper disposal. Any recovered product can be used for the usual purpose, depending on the extent and kind of contamination. Replace damaged containers immediately to avoid loss of material and contamination of surrounding atmosphere. Collect product for recovery or disposal. Ventilate enclosed spaces.

## SECTION 7 – HANDLING AND STORAGE

<b>Handling</b>	Good industrial practice in housekeeping and personal hygiene should be followed. Avoid contact with eyes, skin and clothing. Do not swallow. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Containers exposed to heat may be under internal pressure. These should be cooled and carefully vented before opening. Clean up immediately to eliminate slipping hazard.
<b>Storage Requirements</b>	Store in a cool, well-ventilated area. Keep away from heat, sparks and flames. Keep containers closed. Do not expose sealed containers to temperatures above 40° C. Avoid moisture contamination.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Ventilation</b>	General exhaust is acceptable.
<b>Respiratory Protection</b>	No specific guidelines available. A NIOSH/MSHA-approved air-purifying respirator equipped with dust, mist, fume cartridges for concentrations up to 100 mg/m <sup>3</sup> particulate. An air-supplied respirator if concentrations are higher or unknown.
<b>Skin Protection</b>	Gloves and protective clothing made from cotton, canvas, rubber or plastic should be impervious under conditions of use. Discard contaminated gloves
<b>Eye/Face Protection</b>	Wear chemical safety goggles/glasses with side-shields. Contact lenses should not be worn when working with this material.
<b>Other Comments</b>	An eyewash station and safety shower should be available.
<b>General Hygiene</b>	Wash hands before breaks and at the end of the workday. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	: Liquid
<b>Odour and Appearance</b>	: Odourless; milky white liquid
<b>Odour Threshold</b>	: Not Applicable
<b>Specific Gravity (Water = 1)</b>	: 1.48 – 1.62
<b>Vapour Pressure (mmHg)</b>	: Not Available
<b>Vapour Density (Air = 1)</b>	: Not Available
<b>Evaporation Rate</b>	: Not Available
<b>Boiling Point</b>	: 100°C, 212°F
<b>Freezing/Boiling Point</b>	: 0°C, 32°F
<b>pH</b>	: 9.5 – 10 (saturated solution)
<b>Solubility in Water</b>	: Slightly soluble in water

## SECTION 10 – STABILITY AND REACTIVITY

<b>Stability/Reactivity</b>	Stable under normal conditions
<b>Conditions to Avoid</b>	High temperatures, sparks, open flames and all other sources of ignition.
<b>Incompatible Materials</b>	Lewis or mineral acids. Maleic Anhydride. Alkalies. Alkaline earths. Phosphorous.
<b>Hazardous Decomposition Products</b>	Thermal decomposition products are toxic and may include oxides of magnesium.
<b>Hazardous Polymerization</b>	Hazardous polymerization will not occur.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Routes of Entry</b>	: Eyes, skin and digestive system.
<b>Skin Contact</b>	: This product may cause irritation, redness and possible damage due to abrasiveness.
<b>Skin Absorption</b>	: Not likely to be absorbed through the skin.
<b>Eye Contact</b>	: May cause irritation, redness and possible damage due to abrasiveness.
<b>Ingestion</b>	: Mild gastrointestinal discomfort. Laxative effect
<b>Inhalation</b>	: Inhalation is not a likely route of exposure at normally encountered temperatures.
<b>Chronic Exposure Effects</b>	: Prolonged use of magnesium hydroxide may cause rectal stones composed of magnesium hydroxide and magnesium carbonate.
<b>Irritancy</b>	: May cause eye and skin irritation.
<b>Sensitization</b>	: No Data Available
<b>Carcinogenicity</b>	: This product is not classified as a carcinogen by ACGIH, IARC, OSHA or NTP.
<b>Teratogenicity</b>	: No adverse teratogenic effects are anticipated.
<b>Mutagenicity</b>	: No adverse mutagenic effects are anticipated.
<b>Reproductive Effects</b>	: No adverse reproductive effects are anticipated.

## SECTION 12 – ECOLOGICAL INFORMATION

<b>General Comments</b>	Not available. Can be dangerous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.
<b>Ecotoxicity</b>	May be harmful to aquatic life.

## SECTION 13 – DISPOSAL CONSIDERATIONS

<b>Waste Disposal</b>	Dispose in accordance with federal, provincial or local government requirements. Contact your local, provincial or federal environmental agency for specific regulations.
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## SECTION 14 – TRANSPORT INFORMATION

<b>TDG Shipping Regulations</b>	Not TDG Regulated
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## SECTION 15 – REGULATORY INFORMATION

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

## SECTION 16 – OTHER INFORMATION

<b>Prepared by:</b>	Lab Services PMC Water Systems Services Inc. 124 Connie Crescent, Unit 9 Concord Ontario L4K 1L7
<b>Preparation Date:</b>	January 3, 2017

While all the data presented is believed to be accurate at the time of preparation, PMC Water Systems Services Inc. makes no warranty; the data is offered for your consideration, investigation and verification.