



## MATERIAL SAFETY DATA SHEET

### SECTION 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION:

**Product Name:** Liquid Alum  
(ALUMINUM SULPHATE SOLUTION)

**Trade Name:** Same

**Product Use:** Water Treatment & Industrial Uses

**Effective Date:** January 13, 2012

**Supplier Name & Address:**  
**FLOCHEM LTD.**  
R.R. #7, Guelph, ON, N1H 6J4

**Emergency Phone Number:** **877-378-7745**

### SECTION 2 - COMPOSITION/INFORMATION INGREDIENTS:

	<u>%</u>	<u>CAS #</u>
Aluminum Sulphate	29 – 50%	10043-01-3 ( <i>anhydrous</i> )
Water	Balance	7732-18-5

### SECTION 3 - HAZARDS IDENTIFICATION:

**EMERGENCY OVERVIEW:** A clear, odourless, light green or amber liquid. Can irritate the skin and eyes. Not flammable, but may release toxic vapours if decomposed in a fire.

**WARNING:**

**Irritating to eyes, skin, respiratory and digestive tracts.**

(See Section 11 for Toxicological Information)

### SECTION 4 - FIRST AID:

**Eyes:**

Flush eyes immediately with fresh running water, holding eyelid open for at least 15 minutes. If irritation persists, seek medical attention.

**Skin:**

Wash skin thoroughly with soap and water. Launder contaminated clothing prior to reuse. If irritation persists, seek medical attention.

**Inhalation:**

Remove victim to fresh air, perform CPR if necessary. If breathing is difficult administer oxygen. Seek immediate medical attention.

**Ingestion:**

If conscious, give large quantity of milk or water. Do not induce vomiting. Seek immediate medical attention.

**Note to Physician:** Treat symptomatically.

## SECTION 5 - FIRE FIGHTING MEASURES:

**Flashpoint:** Not Flammable

**Extinguishing Media:** This product is not combustible; use any extinguishing media suitable for surrounding fire.

**Fire Fighting Precautions:** Use self-contained breathing apparatus. Use water spray to cool containers.

Decomposition releases may include hydrogen chlorides, aluminum oxides and oxides of sulfur.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES:

### In case of spill or other release:

Dilute small spills or leaks cautiously with plenty of water. Neutralize any further residue with Soda Ash, Lime or Limestone and collect in appropriate container for disposal. Ventilation is required if Soda Ash is used due to the release of carbon dioxide gas.

### For large spills:

Dike up with Soda Ash and neutralize as above. Collect liquid and/or waste and dispose of according to municipal and provincial regulations and notify authorities if quantity exceeds reportable limits as noted in Section 15.

## SECTION 7 - HANDLING & STORAGE:

Avoid contact with skin & eyes. Do not breathe product mist. Store in a cool place. Keep empty product containers away from heat and ignition sources. Prevent product from coming in contact with common metals.

## SECTION 8 - EXPOSURE CONTROLS:

Use local exhaust if mist is anticipated. Where exposure exceeds the established exposure limit, respiratory protection is recommended. Wear appropriate personal protective equipment including, impervious chemical gloves, full chemical suit with chemical goggles and face shield. The presence of an eyewash station and safety shower in close proximity to work area is recommended.

## SECTION 9 - PHYSICAL PROPERTIES:

**Physical State:** Liquid

**Chemical Formula:** 48.5 %  $\text{Al}_2(\text{SO}_4)_3$

**Specific Gravity:** 1.2 ~ 1.226 (water = 1.0)

**Boiling Point:** 106°C

**Appearance:** Clear

**Molecular Weight:** ~594 for  $\text{Al}_2(\text{SO}_4)_3 \cdot 14\text{H}_2\text{O}$

**pH:** < 2.5

**Melting Point:** -13°C

## SECTION 10 - STABILITY & REACTIVITY:

Normally stable. If evaporated to dryness, residue should not be exposed to elevated temperatures (760°C) this will release toxic and corrosive gases.

**Incompatibles:** Alkalis and water reactive materials such as oleum. Causes exothermic reaction.

**Hazardous Decomposition Products:** At elevated temperatures, sulfur oxides may be formed. These are toxic, corrosive oxidizers.

Hazardous Polymerization will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION:

### **Potential Health Hazards:**

**Skin:** May cause skin irritation

**Eyes:** May strongly irritate or burn the eyes.

**Inhalation:** Product mists may cause irritation to the respiratory tract.

**Ingestion:** May irritate the gastrointestinal tract, concentrate may cause burns to digestive tract.

## SECTION 12 - ECOLOGICAL CONSIDERATIONS:

### **Fish Test Results:**

Acute toxicity freshwater (OECD 203)

Duration 96 hr. Species Goldfish 100 mg/L LC50

## SECTION 13- DISPOSAL CONSIDERATIONS:

If permitted by regulations, material may be neutralized with alkali. Consult with municipal and provincial authorities.

## SECTION 14 - TRANSPORT INFORMATION:

**TDG Classification:** Class 8, UN Number 3264, Packing Group III

**Shipping Name:** Corrosive Liquid, Acidic, Inorganic, N.O.S. (Aluminum Sulphate Solution)

Reportable Quantity: 5000 lbs.

## SECTION 15 - REGULATORY INFORMATION:

**W.H.M.I.S. Classification:** E, Corrosive

On the DSL.

## **SECTION 16 - OTHER INFORMATION:**

**Disclaimer:**

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO THE BEST OF OUR KNOWLEDGE, TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS OBTAINED FROM THE USE THEREOF.

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**- END OF MSDS -**

