



M² Polymer Technologies, Inc.

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SAFETY DATA SHEET: May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

EFFECTIVE DATE: January 2, 2014

SECTION I CHEMICAL PRODUCT & SUPPLIER'S IDENTIFICATION

Product Name: PHOSCLEAR[®] (Water Treatment Compound)
Chemical Name: Buffered Aluminum Sulfate

M² Polymer Technologies, Inc.
P.O. Box 365
West Dundee, IL 60118

Telephone Number for Information: 847/836-1393
Last Update : January 2, 2014

SECTION II HAZARD IDENTIFICATION

Component Information/Information on Non-Hazardous Components

The components of this product are not regulated as hazardous under 29 CFR and 49 CFR. However, the manufacturer recognizes the potential for respiratory tract irritation as a result of inhalation of this material as a respirable dust. See Sections 8, 11, 14 and 15 for further information.

Emergency Overview

Phosclear is a white, granular, odorless powder. The components dissolve readily in water. Although not regulated as a hazardous material, the respirable dust is a potential respiratory tract irritant.

Potential Health Effects - Eyes

Dust may cause burning, drying, itching and other discomfort resulting in reddening of the eyes.

Potential Health Effects - Skin

Dust exposure, such as in manufacturing, may aggravate existing skin conditions due to drying.

Potential Health Effects - Ingestion

Not a likely route of entry. Tests show that Alum & Soda Ash are non-toxic if ingested. However, as in the instance of any non-food consumption, seek medical attention in the event of any adverse symptoms.

Potential Health Effects - Inhalation

Respirable dust exposure may cause respiratory tract & lung irritation and may aggravate existing respiratory conditions.

HMIS Ratings: Health 1 Fire 0 Reactivity 0

Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe *=Chronic Hazard

SECTION III COMPOSITION / INGREDIENT INFORMATION

CAS #	Component	Percent
10043-01-3	Aluminum Sulfate (Alum)	60 - 90%
497-19-8	Sodium Carbonate (Soda Ash)	10 - 40%

SECTION IV FIRST AID MEASURES

First Aid - Eyes

Immediately flush eyes with water for at least 15 minutes.

First Aid - Skin

Remove dust from skin using soap and water.

First Aid - Ingestion

Non-toxic. However, if adverse symptoms appear, seek medical attention.

First Aid - Inhalation

If inhaled, move to source of fresh air. Seek medical attention if symptoms persist.

SECTION V**FIRE FIGHTING MEASURES**

General Fire Hazards

No recognized fire hazards associated with the product.

Upper Flammable Limit (UFL):	Not Flammable
Lower Flammable Limit (LFL):	Not Flammable
Autoignition Temperature:	Not Applicable
Flash Point:	Not Flammable
OSHA Flammability Classification:	Not Applicable

Hazardous Combustion Products

None known.

Extinguishing Media

Water spray, foam, carbon dioxide or dry chemical.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus,

NFPA Ratings: Health=1 Fire=0 Reactivity=0

Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

SECTION VI**ACCIDENTAL RELEASE MEASURES**

Containment Procedures

Sweep or vacuum material when possible and shovel into a waste container.

Clean Up Procedures

Shovel material and place in clean, dry container and cover. Collect Liquid and/residue and dispose of in accordance with applicable regulations.

Evacuation Procedures

None required.

Special Procedures

Avoid respirable dust. Wear a nuisance style dust mask if dusty conditions occur.

SECTION VII**HANDLING AND STORAGE**

Handling Procedures

Avoid contact with skin, eyes & clothing. Avoid breathing dust. Wash thoroughly after handling.

Storage Procedures

Store in a dry, closed container. Product is HYGROSCOPIC and will slowly absorb moisture from the air causing the material to clump and to harden.

SECTION VIII**EXPOSURE CONTROLS / PERSONAL PROTECTION**

Exposure Guidelines

Aluminum Sulfate

ACGIH TLV = 2 mg/m³

OSHA PEL = 2 mg/m³

Engineering Controls

Provide local exhaust ventilation to maintain exposure to < 0.05 mg/m³ over eight hours.

Personal Protective Equipment – Eyes & Face

Wear safety goggles. Do not wear contact lens.

Personal Protective Equipment – Skin

Wear appropriate clothing to prevent skin contact.

Personal Protective Equipment – Respiratory

Wear a nuisance style dust mask for mild dusty conditions or a high efficiency filter if particulate concentrations are excessively dusty.

Personal Protective Equipment – General

Follow normal safety precautions and maintain good housekeeping. Wash thoroughly after handling.

SECTION IX**PHYSICAL & CHEMICAL PROPERTIES**

Appearance:	White granular powder	Odor:	None
Physical State:	Solid	pH:	5.5 to 6.5 (1% in water)
Vapor Pressure:	Not Applicable	Vapor Density:	Not Applicable
Boiling Point:	Not Applicable	Melting Point:	Not Applicable
Solubility (H₂O):	Not soluble	Specific Gravity:	1.5 to 2.0
Evaporation Rate:	Not Applicable		

SECTION X**CHEMICAL STABILITY & REACTIVITY INFORMATION**

Chemical Stability

Product is stabile.

Chemical Stability: Conditions to Avoid

Avoid temperatures above 760°C as this may yield toxic & corrosive gases.

Incompatibility

Alkalis and water reactive materials such as oleum can cause exothermic reactions.

Hazardous Decomposition

At highly elevated temperatures, sulfur oxides may be formed. These are toxic and corrosive and are oxidizers.

Hazardous Polymerization

None

SECTION XI**TOXICOLOGICAL INFORMATION**

General Product Information

Acute inhalation of respirable dust may cause irritation of upper respiratory tract and lungs.

Acute Toxicity – LD50

Aluminum Sulfate (CAS 10043-01-3)
LD50 Oral: 1930 mg/kg (rat)
6207 mg/kg (mouse)

Carcinogenicity

None

Component Carcinogenicity

There are no known carcinogenic chemicals in this product.

Mutagenicity

None

SECTION XII**ECOLOGICAL INFORMATION**

Ecotoxicity LC50 in Freshwater Fish

Aluminum Sulfate (CAS 10043-01-3)
LC50: 100 mg/L Carassius auratus 96 h
LC50: 37 mg/L Gambusia affinis 96 h

General Product Information

The components of PHOSCEAR are readily soluble in water and approved for water treatment application by the AWWA.

Component Analysis – Ecotoxicity & Aquatic Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Environmental Fate

The Aluminum Sulfate in PHOSCLEAR reacts rapidly with soluble ortho-phosphate in water forming a highly insoluble precipitate Aluminum Phosphate (AlPO₄) which forms as a nearly invisible floc on the bottom of a treated lake, pond or decorative water feature.

SECTION XIII**DISPOSAL CONSIDERATIONS**

US EPA Waste Number & Descriptions**General Product Information**

Product is non-hazardous waste material suitable for approved solid waste landfills.

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components

Disposal Instructions

Dispose of in accordance with Local, State and Federal regulations.

SECTION XIV**TRANSPORTATION INFORMATION**

International Transportation Regulations

DOT Hazard Class	9	(for Alum)
UN-No.	UN3077	
Packaging Group	PGIII	

SECTION XV**REGULATORY INFORMATION**

General Product Information

The product is not Federally regulated as a hazardous material.

International Inventories

TSCA	Yes
DSL	Yes
ELINCS	No
EINECS	Yes
ENCS	Yes
China	Yes
KECL	Yes
PICCS	Yes
AICS	Yes

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

NONE

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	No
Acute Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Component Analysis - State

None of the components are listed on State lists from CA, FL, MA, MN, NJ or PA.

Component Analysis – WHMIS IDL

Alum is classified as WHMIS Hazard Class D2B Toxic Materials

Component Analysis – Inventory**State Regulations**

California Proposition 65 This product does not contain any Proposition 65 chemicals

SECTION XVI**OTHER INFORMATION**

Other Information

The information presented in this document is presented in good faith and is believed to be accurate as to the effective date given. However, no warranty, expressed or implied is given. It is the buy's responsibility to ensure that its activities comply with Federal, State or provincial and local laws.