

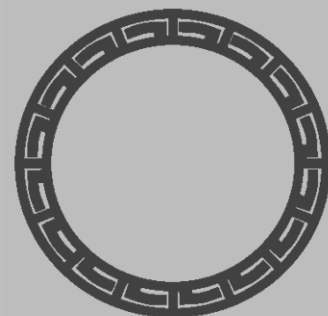
# Safety Data Sheets

## Alum

Product code: PC-000205

Departement: chemical products

C.A.S. : 10043-01-3



**KAMA**  
PIGMENTS

### Section: 1 Identification

|                             |   |
|-----------------------------|---|
| Product name                | Dry Alum, Aluminum sulfate  |
| Product Code (Distributor)  | PC-000205   |
| Intended Use of the Product | Alum is used as a coagulating agent in municipal and industrial water and wastewater treatment and as an additive in papermaking. |
| Chemical formula            | $Al_2(SO_4)_3$  |
| Emergency Telephone Number: | Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300  |

### Section: 2 Hazard Identification

|   |   |          |
|---|---|----------|
| Other Hazards Not Contributing to the Classification: | may aggravate those with pre-existing eye, skin, or respiratory conditions. | Exposure |
| Unknown Acute Toxicity (GHS):                         | Not available   |          |

#### HGS Label Elements



**Signal Word**

warning

**GHS Classification**

Corrosive to metals-Cat.1

Serious eye damage/eye irritation-Cat.1

**Hazard statements**

Causes skin irritation

Causes eye irritation

**Precautionary Statements**

P234 Keep only in original packaging.

P280 Wear eye protection/ face protection.

P305 + P351 + P338 +

P310 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if

present and easy to do. Continue rinsing. Immediately call a

POISON CENTER/doctor.

P390 Absorb spillage to prevent material damage.

---

**Section: 3 Composition / Information on Ingredients**

| Name                                  | CAS        | EINECS    | % (w/w) |
|---------------------------------------|------------|-----------|---------|
| Aluminum Sulfate                      | 10043-01-3 | 233-135-0 | 100     |
| Full text of H-phrases: see section 2 |            |           |         |

---

**Section: 4 First Aid Measures**

## Description of First Aid Measures

## General:

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

## Inhalation:

Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

## Skin Contact:

Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

## Eye Contact:

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

## Ingestion:

Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

## Most Important Symptoms and Effects Both Acute and Delayed

## General:

Causes serious eye irritation. Causes skin irritation.

## Inhalation:

May cause respiratory irritation.

## Skin Contact:

Causes skin irritation.

## Eye Contact:

Causes serious eye irritation.

## Ingestion:

Ingestion is likely to be harmful or have adverse effects.

## Chronic Symptoms:

None expected under normal conditions of use.

If you feel unwell, seek medical advice

---

## Section: 5 Fire Fighting Measures

|   |   |
|---|---|
| Suitable Extinguishing Media:                         | Use extinguishing media appropriate for surrounding fire.   |
| Unsuitable Extinguishing Media:                       | Do not use a heavy water stream. Use of heavy stream of water may spread fire.  |
| Special Hazards Arising From the Substance or Mixture |   |
| Fire Hazard:  | Not considered flammable but may burn at high temperatures.   |
| Explosion Hazard:                                     | Product is not explosive.   |
| Reactivity:   | Hazardous reactions will not occur under normal conditions.   |
| Advice for Firefighters                               |   |
| Precautionary Measures Fire:                          | Not available   |
| Firefighting Instructions:                            | Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.             |
| Protection During Firefighting:                       | Do not enter fire area without proper protective equipment, including respiratory protection.   |
| Hazardous Combustion Products:                        | Forms aluminum oxide, sulfur dioxide and/or sulfur trioxide at temperatures above 760 °C (1400 °F) or when dry alum is encompassed in a fire involving other burning materials. |
| Other information:                                    | Refer to Section 9 for flammability properties.   |

---

## Section: 6 Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (dust, vapor, mist, gas).

#### For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

#### For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. I

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

#### Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Avoid generation of dust during clean-up of spills. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant.

Reference to Other Sections: See Heading 8. Exposure controls and personal protection.

---

## Section: 7 Handling And Storage

### Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Good housekeeping is needed during storage, transfer, handling, and use of this material to avoid excessive dust accumulation. Protect from moisture.

### Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong bases.

---

## Section: 8 Exposure Control/Personal Protection

|                                    |   |
|------------------------------------|---|
| Exposure Controls                  |   |
| Control Parameters:                | No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.   |
| Appropriate Engineering Controls:  | Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. |
| Personal Protective Equipment:     | Protective goggles. Gloves. Protective clothing.  |
| Materials for Protective Clothing: | Chemically resistant materials and fabrics.   |
| Hand Protection:                   | Wear chemically resistant protective gloves.  |
| Eye Protection:                    | Chemical goggles or safety glasses.   |
| Skin and Body Protection:          | Wear suitable protective clothing.  |
| Respiratory Protection:            | Use NIOSH-approved dust mask if dust has the potential to become airborne.  |
| Environmental Exposure Controls:   | Do not allow the product to be released into the environment.   |
| Consumer Exposure Controls:        | Do not eat, drink or smoke during use   |

---

## Section: 9 Physical and Chemical Properties

|   |   |
|---|---|
| Physical State:                             | Solid   |
| Appearance:                                 | White to off-white powder or granules                                 |
| Odor:                                       | Not available   |
| Odor Threshold:                             | Not available   |
| pH:   | > 2.9 @ 5%  |
| Relative Evaporation Rate (butylacetate=1): | Not available   |
| Melting Point:                              | 86 °C (186.8°F)   |
| Freezing Point:                             | Not available   |
| Boiling Point:                              | 117 °C (242.6°F)  |
| Flash Point:                                | Not available   |
| Auto-ignition Temperature:                  | Not available   |
| Decomposition Temperature:                  | Not available   |
| Flammability (solid, gas):                  | Not available   |
| Lower Flammable Limit:                      | Not available   |
| Upper Flammable Limit:                      | Not available   |
| Vapor Pressure:                             | Not available   |
| Relative Vapor Density at 20 °C:            | Not available   |
| Relative Density:                           | Not available   |
| Specific Gravity:                           | Not available   |
| Solubility:                                 | Water: Complete   |
| Partition coefficient: n-octanol/water:     | Not available   |
| Viscosity:                                  | Not available   |
| Explosion Data –                            |   |
| Sensitivity to Mechanical Impact:           | Not expected to present an explosion hazard due to mechanical impact. |
| Sensitivity to Static Discharge:            | Not expected to present an explosion hazard due to static discharge.  |

---

## Section: 10 Stability And Reactivity

|                                     |   |
|-------------------------------------|---|
| Reactivity:                         | Hazardous reactions will not occur under normal conditions.                           |
| Chemical Stability:                 | Stable under recommended handling and storage conditions (see section 7).             |
| Possibility of Hazardous Reactions: | Hazardous polymerization will not occur.  |
| Conditions to Avoid:                | Direct sunlight. Extremely high or low temperatures. Ignition sources.                |
| Incompatible materials.             | Moisture., Strong bases.  |
| Hazardous Decomposition Products:   | Oxides of aluminum. The decomposition products are corrosive and hazardous to health. |

## Section: 11 Toxicological Information

|   |  |
|---|--|
| LD50 and LC50 Data:                                 | Not available  |
| Skin Corrosion/Irritation:                          | Causes skin irritation.                                    |
| pH:   | > 2.9 @ 5%   |
| Serious Eye Damage/Irritation:                      | Causes eye irritation.                                     |
| Respiratory or Skin Sensitization:                  | Not classified   |
| Germ Cell Mutagenicity:                             | Not classified   |
| Teratogenicity:                                     | Not available  |
| Carcinogenicity:                                    | Not classified   |
| Specific Target Organ Toxicity (Repeated Exposure): | Not classified   |
| Reproductive Toxicity:                              | Not classified   |
| Specific Target Organ Toxicity (Single Exposure):   | Not classified   |
| Aspiration Hazard:                                  | Not classified   |
| Symptoms/Injuries After Inhalation:                 | May cause respiratory irritation.                          |
| Symptoms/Injuries After Skin Contact:               | Causes skin irritation.                                    |
| Symptoms/Injuries After Eye Contact:                | Causes serious eye irritation.                             |
| Symptoms/Injuries After Ingestion:                  | Ingestion is likely to be harmful or have adverse effects. |
| Chronic Symptoms:                                   | None expected under normal conditions of use.              |

---

## Section: 12 Ecological Information

|                                |                                   |
|--------------------------------|-----------------------------------|
| Toxicity:                      | Not classified                    |
| Persistence and Degradability: | Not available                     |
| Bioaccumulative Potential:     | Not available                     |
| Mobility in Soil:              | Not available                     |
| Other Adverse Effects          |                                   |
| Other Information:             | Avoid release to the environment. |

---

## Section: 13 Disposal Considerations

|                                 |  |
|---------------------------------|--|
| Waste Disposal Recommendations: | Dispose of waste material in accordance with all local, regional, national, and international regulations. |
| Ecology – Waste Materials:      | Avoid release to the environment.  |

---

## Section: 14 Transport Information

|                           |   |
|---------------------------|---|
| DOT (US)                  |   |
| UN number: 3260 Class:    | 8 Packing group: III  |
| Proper shipping name:     | Corrosive solid, acidic, inorganic, n.o.s. (Aluminium sulphate) |
| Reportable Quantity (RQ): | 5000 lbs  |
| Marine pollutant:         | No  |
| Poison Inhalation Hazard: | No  |
| IMDG                      |   |
| UN number: 3260 Class:    | 8 Packing group: III EMS-No: F-A, S-B                           |
| Proper shipping name:     | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Aluminium sulphate) |
| Marine pollutant:         | No  |
| IATA                      |   |
| UN number:                | 3260 Class: 8 Packing group: III                                |
| Proper shipping name:     | Corrosive solid, acidic, inorganic, n.o.s. (Aluminium sulphate) |

---

## Section: 15 Regulatory Information

|                                  |  |
|----------------------------------|--|
| WHMIS Classification             |  |
| Class D Division 2 Subdivision B | Toxic material causing other toxic effects |

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

---

## Section: 16 Other Information

|                     |  |
|---------------------|--|
| NFPA Health Hazard: | 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given. |
| NFPA Fire Hazard:   | 1 - Must be preheated before ignition can occur.   |
| NFPA Reactivity:    | 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.   |
| Reference           | Manufacturer's material safety data sheet.   |
| Prepared by         | Kama pigments  |

---

### Disclaimer:

Kama pigments, expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information, refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Kama pigments Sales Office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Kama pigments makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Kama pigments' control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.



**KAMA**  
**PIGMENTS**

Last revision: 2022-06-13

