



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Aluminum Hydroxide

Revision Date: 02/19/2024

**Section 1. Identification**

**1.1. Product identifier**

**Product Identity** Aluminum Hydroxide  
**Alternate Names** Aluminum hydrate; Aluminum trihydrate; Hydrated alumina

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Intended use** Fire Retardant Fillers, Solid Surface Fillers, Wire & Cable Compound Fillers, CCL Raw Materials for PAC & Aluminum Sulphate

**1.3. Details of the supplier of the safety data sheet**

**Company Name** Silver Fern Chemical, Inc.  
2226 Queen Anne Avenue North  
Seattle, WA 98109 USA  
Customer Service: 1-866-282-3384 /  
info@silverfernchemical.com  
Website - www.silverfernchemical.com

**Emergency**  
**24-hour Emergency Telephone No.** Emergency telephone number  
Infotrac: 1-800-535-5053; Outside USA & Canada +1-352-323-3500

**Section 2. Hazard(s) identification**

**2.1. Classification of the substance or mixture**

No applicable GHS categories.

**2.2. Label elements**



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Aluminum Hydroxide

Revision Date: 02/19/2024

No applicable GHS categories.

**[Prevention]**

No GHS prevention statements

**[Response]**

No GHS response statements

**[Storage]**

No GHS storage statements

**[Disposal]**

No GHS disposal statements

**2.3 Hazards Not Otherwise Classified**

**Eye Contact:** Contact with eyes may cause irritation

**Skin Contact:** May cause eye/skin irritation

**Inhalation:** May cause irritation of respiratory tract

**Ingestion:** Ingestion may cause irritation to mucous membranes

**Aggravated Medical Conditions:**

- Asthma
- Lung irritation
- Dermatitis

Avoid dust formation.

Avoid dust formation in confined areas.

**Section 3. Composition/information on ingredients**

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Aluminium hydroxide CAS Number: 21645-51-2	>99.6	Not Classified	----

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

\*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.



## Section 4. First aid measures

### 4.1. Description of first aid measures

**General** In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

**Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is difficult, give oxygen. If breathing is stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes** Immediately flush with plenty of water. After initial flushing, remove any contact lenses if present and easy to do. Continue to rinse with plenty of clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Rinse mouth with water if conscious. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed

**Overview** No specific symptom data available.  
Treat symptomatically. Check section 2.2 (GHS Label Elements) for further details.

## Section 5. Fire-fighting measures

### 5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Unsuitable extinguishing media: Do not use; water jet.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

### 5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Aluminum Hydroxide

Revision Date: 02/19/2024

face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

## Section 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).  
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

### 6.3. Methods and material for containment and cleaning up

Sweep up or pick up.  
Avoid dust formation.  
Avoid dust formation in confined areas.

## Section 7. Handling and storage

### 7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.  
Avoid dust formation.  
Avoid dust formation in confined areas.

### 7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: No available information

### 7.3. Specific end use(s)

No available information



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Aluminum Hydroxide**

Revision Date: 02/19/2024

**Section 8. Exposure controls / personal protection**

**8.1. Control parameters**

**Exposure**

CAS No.	Ingredient	Source	Value
21645-51-2	Aluminium hydroxide	OSHA	15 mg/m <sup>3</sup> (total dust), 5 mg/m <sup>3</sup> (respirable fraction) (as aluminum)
ACGIH	TWA 1 mg/m <sup>3</sup> (respirable particulate matter) (Aluminum and its insoluble compounds)		
NIOSH	10 mg/m <sup>3</sup> (total dust), 5 mg/m <sup>3</sup> (respirable fraction) (as Aluminum)		

**8.2. Exposure controls**

- Respiratory** If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
- Eyes** Protective safety glasses with side shields or safety goggles recommended
- Skin** Avoid skin contact. Wear suitable protective gloves.
- Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
- Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

**Section 9. Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

- Appearance** White Powder
- Odor** No available information
- Odor threshold** No available information



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Aluminum Hydroxide

Revision Date: 02/19/2024

<b>pH</b>	8–9
<b>Melting point / freezing point</b>	Decomposes before melting
<b>Initial boiling point and boiling range</b>	No available information
<b>Flash Point</b>	No available information
<b>Evaporation rate (Ether = 1)</b>	No available information
<b>Flammability (solid, gas)</b>	No available information
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> No available information <b>Upper Explosive Limit:</b> No available information
<b>Vapor pressure (Pa)</b>	No available information
<b>Vapor Density</b>	No available information
<b>Relative Density</b>	2.42 g/cm <sup>3</sup>
<b>Solubility in Water</b>	Soluble in strong acids and strong bases.
<b>Partition coefficient n-octanol/water (Log Kow)</b>	No available information
<b>Auto-ignition temperature</b>	Does not ignite
<b>Decomposition temperature</b>	No available information
<b>Viscosity (cSt)</b>	No available information
<b>VOC Content</b>	
<b>Oxidising properties</b>	No available information
<b>Explosive properties</b>	No available information
<b>Bulk Density</b>	0.15-1.3 g/cm <sup>3</sup>
<b>Particle Characteristics</b>	

## 9.2. Other information

No other relevant information.

## Section 10. Stability and reactivity

### 10.1. Reactivity

Hazardous Polymerization will not occur.

### 10.2. Chemical stability

Stable under normal circumstances.

### 10.3. Possibility of hazardous reactions

Heating the material above 200 degree Celsius will result in a sudden release of water vapor (steam). Precautions must be taken to dissipate the vapor and any pressure that may be generated. A sudden increase in pressure could cause damage or explosion in enclosed equipment.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Aluminum Hydroxide**

Revision Date: 02/19/2024

**10.4. Conditions to avoid**

Avoid high temperatures and contact with incompatible material

**10.5. Incompatible materials**

No available information

**10.6. Hazardous decomposition products**

Steam.

**Section 11. Toxicological information**

**Acute toxicity**

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Aluminium hydroxide - (21645-51-2)	> 10,000, Rat - Category: NA	No data available.	No data available.	No data available.	No data available.

**Carcinogen Data**

CAS No.	Ingredient	Source	Value
21645-51-2	Aluminium hydroxide	OSHA	Regulated Carcinogen: No;
NTP	Known: No; Suspected: No;		
IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
ACGIH	No Established Limit		

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Aluminum Hydroxide**

Revision Date: 02/19/2024

Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

**Section 12. Ecological information**

**12.1. Toxicity**

No additional information provided for this product. See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Aluminium hydroxide - (21645-51-2)	219.00, Fish	0.07, Daphnia magna	0.02, Algae

**12.2. Persistence and degradability**

There is no data available on the preparation itself.

**12.3. Bioaccumulative potential**

No available information

**12.4. Mobility in soil**

No available information

**12.5. Results of PBT and vPvB assessment**

This product contains no PBT/vPvB chemicals.

**12.6. Other adverse effects**

No available information

**Section 13. Disposal considerations**

**13.1. Waste treatment methods**

Observe all federal, state and local regulations when disposing of this substance.





**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Aluminum Hydroxide**

Revision Date: 02/19/2024

**Section 14. Transport information**

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>14.1. UN number</b>	Not Regulated	Not Regulated	Not Regulated
<b>14.2. UN proper shipping name</b>	Not Regulated	Not Regulated	Not Regulated
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> Not Applicable <b>Sub Class:</b> Not Applicable	<b>IMDG:</b> Not Applicable <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> Not Applicable <b>Sub Class:</b> Not Applicable
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable

**14.5. Environmental hazards**

Marine Pollutant: No;

**14.6. Special precautions for user**

No available information

**Section 15. Regulatory information**

**Regulatory Overview**      The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Inventory - United States - Section 8(b) Inventory (TSCA):**

Aluminium hydroxide    ( Commercial Status Designation: ACTIVE)

The following flags are used:

- Active - indicates commercial status designation of active
- E - indicates a substance that is the subject of a Section 5(e) Consent Order under TSCA.
- F - indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the
- P - indicates a commenced Premanufacture Notice (PMN) substance.
- R - indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - indicates a substance that is identified in a final Significant New Uses Rule.
- SP - indicates a substance that is identified in a proposed Significant New Uses Rule.
- T - indicates a substance that is the subject of a final Section 4 test rule under TSCA.
- UVCB Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials •XU -
- Y1 - indicates a polymer that has a number-average molecular weight greater than 1,000 and that was exempt under the 1984
- Y2 - indicates a polymer that is a polyester and that was exempt under the 1984 polymer exemption rule.



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Aluminum Hydroxide

Revision Date: 02/19/2024

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Developmental Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 Label Warning:**

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Mass RTK Substances (>1%) :**

**New Jersey RTK Substances (>1%) :**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Pennsylvania RTK Substances (>1%) :**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Aluminum Hydroxide

Revision Date: 02/19/2024

**OSHA Process Safety Management Standard Highly Hazardous Chemicals, Toxics and Reactives:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US EPA List of Regulated Substances under the Risk Management Plan (RMP) Program:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US EPA Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the Minimum Risk Exemption:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**U.S. - DEA List II or Essential Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**U.S. - DEA - Exempt Chemical Mixtures - List 1 and 2:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US DHS Chemical Facility Anti-Terrorism Standards (CFATS):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

<p><b>Section 16. Other information</b></p>
---

**Revision Date**

02/19/2024

**DISCLAIMER OF RESPONSIBILITY**

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, connected with handling, storage, use, or



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Aluminum Hydroxide**

Revision Date: 02/19/2024

disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

The full text of the phrases appearing in section 3 is:

Not Applicable

**End of Document**

Approved – TL 2-20-24