

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name Aluminum Trihydrate

CAS number 21645-51-2

Synonyms Alumina Hydrate, ATH, Aluminum Hydroxide

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

Identified uses Laboratory Chemicals

#### 1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC  
12501 Pauls Valley Road  
Austin, Texas 78737  
U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

#### 1.4 Emergency telephone

Emergency Phone # US & Canada: 1-800-535-5053 INFOTRAC  
International 1-352-323-3500 INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**  
Not classified as a hazard.

#### 2.2 GHS Label elements, including precautionary statements

None required.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Alumina Trihydrate	Aluminum Trihydrate, ATH	21645-51-2	100%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

<b>General advice</b>	Show this sheet to a doctor if medical advice is needed.
<b>If inhaled</b>	If overcome by high dust concentrations, remove to a ventilated area.
<b>In case of skin contact</b>	Wash skin thoroughly with soap and water. Consult a physician if irritation persists.
<b>In case of eye contact</b>	Flush eyes thoroughly for several minutes taking care to rinse under eyelids. Do not scrub. Abrasion may cause irritation. If discomfort continues, continue to wash with water. If irritation persists, consult a physician.
<b>If swallowed</b>	If swallowed, dilute with large amounts of water. Seek medical advice.

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

None.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** Use extinguishing measures appropriate to the surrounding fire.

**Unsuitable extinguishing media** Full water jet.

### 5.2 Specific hazards arising from the substance or mixture

None.

### 5.3 Special protective equipment and precautions for firefighters

Use self-contained breathing apparatus. Fire residues and contaminated firefighting water must be disposed of following local regulations.

## 5.4 Further information

**Flash Point** Not applicable.

**Autoignition Temperature** Not applicable.

### Explosion limits

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact** No data available.

**Sensitivity to Static Discharge** No data available.

### NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

## SECTION 6: Accidental release measures

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

Avoid dust formation. In case of inadequate ventilation wear respiratory protection.

### 6.2 Environmental precautions

Do not discharge into drains/surface water/groundwater.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and dispose of per local regulations.

### 6.4 Reference to other sections

See Sections 8 & 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid generating dust during handling. Provide vacuuming if dust is raised. Wash hands before breaks and after work. Use barrier skin cream.

#### Hygiene measures

Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material,

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

#### Storage conditions

Keep container tightly closed. Store in a dry place. Do not store with food.

#### Incompatibilities

Strong acids and bases. Alumina trihydrate reacts vigorously with strong acids and will dissolve in caustic solutions.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

No established exposure limits for the specific components of this product.

Component	Osha PEL TWA
Particulates not otherwise classified	15 mg/m <sup>3</sup> total, 5 mg/m <sup>3</sup> respirable

### 8.2 Exposure controls

#### Appropriate engineering controls

Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

#### Personal protective equipment

##### Eye/face protection

Safety glasses.

##### Skin protection

Protective clothing and gloves.

##### Body Protection

Protective clothing.

##### Respiratory protection

In the event of high concentrations use a respirator with a P1 filter for short-term use.

##### Control of environmental exposure

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Powder solid
Appearance	White
Odor	Odorless
Odor Threshold	No data available
pH	8-9 (20°C saturated solution)
Melting Point/Range	Decomposes before melting.
Boiling Point/Range	2980°C (5396°F)

Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Density	2.42
Solubility	0.00009 g/l (20°C/68°F) in water Soluble in alkaline aqueous solutions or HCL, H2SO4, and other strong acids in the presence of some water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	>200°C
Viscosity	No data available
Molecular Formula	No data available
Molecular Weight	No data available
VOC Content(%)	No data available
Oxidizing properties	No data available

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

None known.

### 10.2 Chemical stability

Alumina trihydrate is stable at room temperature in closed containers under normal storage and handling conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions are known.

### 10.4 Conditions to avoid

Temperature >392°F (200°C).

### 10.5 Incompatible materials

Strong acids and bases. Alumina trihydrate reacts vigorously with strong acids and will dissolve in caustic solutions.

### 10.6 Hazardous decomposition products

Not applicable.

## SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Product Information, Component Information

#### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aluminum hydroxide	>2000 mg/kg bw (Rat)	-	LC50: 7.6 mg/l/4h (Rat)

#### Skin corrosion/irritation

No known significant effects or critical hazards.

#### Serious eye damage/eye irritation

Exposure to airborne concentrations above statutory or recommended exposure limits may irritate the eyes.

#### Respiratory or skin sensitization

No classification.

#### Germ cell mutagenicity

No evidence of any mutagenic effects.

#### Carcinogenicity

No evidence of carcinogenic effects.

#### Specific target organ toxicity - single exposure

None known.

#### Specific target organ toxicity - repeated exposure

None known.

#### Reproductive toxicity

No evidence of any reproductive toxicity effects.

#### Chronic effects

No information available.

## 11.2 Additional Information

No information available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Fish toxicity: LC50>100 mg/l in *Salmo trutta*.

Invertebrate toxicity: EC50>100 mg/l in *Daphnia Magna*

Algae toxicity: EC50 >100 mg/l in *Selenastrum capricornutum*

### 12.2 Persistence and degradability

Not applicable for inorganic substances.

### 12.3 Bio accumulative potential

Not applicable

### 12.4 Mobility in soil

Not applicable

### 12.5 Results of PBT and vPvB assessment

Not applicable

### 12.6 Endocrine disrupting properties

No information available.

### 12.7 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

Recycle if possible or landfill. This substance is inert and does not require special disposal methods. Follow applicable Federal, state, and local regulations.

## SECTION 14: Transport information

### DOT (US)

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Aluminum Trihydrate

### IMDG

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Aluminum Trihydrate

### IATA

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Aluminum Trihydrate

## SECTION 15: Regulatory information

### US federal regulations

#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not listed/applicable.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed/applicable.

#### **SARA 304 Emergency release notification**

Not listed/applicable.

#### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed/applicable.

### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

#### **SARA 302 Extremely hazardous substance**

Not listed/applicable.

#### **SARA 311/312 Hazardous**

Not listed/applicable.

#### **SARA 313 (TRI reporting)**

Not listed/applicable.

### **Other federal regulations**

#### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not listed/applicable.

#### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not listed/applicable.

#### **Safe Drinking Water Act**

Not listed/applicable.

#### **FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed/applicable.

### **US state regulations**

#### **US. Massachusetts RTK - Substance List**

Not listed/applicable.

#### **US. New Jersey Worker and Community Right-to-Know Act**



Not listed/applicable.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed/applicable.

**California Proposition 65**

Not listed/applicable.

**SECTION 16: Other information**

Date of Issue: 6/5/2025

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.