

Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Flame Out - Alumina Trihydrate

Synonyms: Alumina Hydrate, ATH, Aluminum Hydroxide, Trihydrate D'aluminae, Hydrate d'aluminae, Gibbsite, Hydroxide d'aluminum, Alumine hydrate, hydrated alumina, Trioxyde d'aluminum, Aluminum Trihydroxide, $Al_2O_3 \cdot 3H_2O$

Recommended Use: refractory material, abrasive, fire retardant and smoke suppressant for plastics, ceramic material.

Manufacturer: Resin Research Inc.

Resin Research West - 4231 S. Fremont Av. Tucson, AZ 85714 Ph. 321-223-5276

Resin Research East - 131 Tomahawk Dr. #11 Indian Harbour Bch. Ph. 321-779-2369

Emergency Phone: Chemtel (800) 4225-3924 **Date Revised:** 12/17/18

Preparer: Greg Loehr

Section 2 - Hazards Identification

Classification of the chemical in accordance with paragraph (d) of 1910.1200: Material is non-hazardous.

Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008 (CLP): Not classified

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not classified

Hazard Pictogram: None **Hazard Statements:** None **Precautionary Statements:**

None **Other hazards:** None

Section 3 - Composition / Information on Ingredients

Ingredient Name	CAS Number	EC Number	Weight	H phrases	R phrases
Alumina Trihydrate	21645-51-2	244-492-7	100%	None	None

Section 4 - First Aid Measures

Inhalation: If overcome by high dust concentrations, remove to a ventilated area.

Eye Contact: 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.

Skin Contact: Wash skin thoroughly with soap and water. Consult a physician if irritation persists.

Ingestion: If swallowed, dilute with large amounts of water. Seek medical advice.

Most important symptoms and effects, both acute and delayed: None

Indication of any immediate medical attention and special treatment needed: None

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Section 5 - Fire-Fighting Measures

Suitable Extinguishing Media: Use extinguishing measures appropriate to the surrounding fire.

Unsuitable Extinguishing Media: None

Special hazards arising from the chemical: None.

Hazardous Combustion Products: None.

Fire-Fighting Instructions: None

Section 6 - Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures:

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

Environmental precautions: None.

Methods and materials for containment and cleaning up:

Sweep up and dispose in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for safe handling: Avoid generating dust during handling.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed.

Store in dry place.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: 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.

Administrative Controls: NA

Eye Protection: Wear tightly fitting safety goggles or safety glasses with side shields.

Hand Protection: Protective gloves are recommended.

Glove material: Nitrile rubber Layer thickness: 0.11 mm

Breakthrough time: >480 min

Contaminated Equipment: Separate contaminated work clothes from street clothes.

Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

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Ingredient	OSHA PEL	ACGIH TLV		
	TWA	STEL	TWA	STEL
Alumina Trihydrate	None Estab	None Estab.	None Estab	None Estab.
Nuisance Dust	15 mg/m ³ total, 5 mg/m ³ respirable	None Estab.	None Estab.	None Estab.

Section 9 - Physical and Chemical Properties

Physical State: white powder

Appearance and Odor: white odorless powder

Odor Threshold: n/e

pH: 8-9 (20% solution)

Freezing/Melting Point: Decomposes before melting. Boiling Point: n/a

Flash Point: Not applicable.

Flash Point Method: Not flammable.

Evaporation Rate: n/a

Flammability: Not flammable.

Upper/lower flammability or explosive limits: n/a

Vapor Pressure: n/e

Vapor Density (Air=1): n/a

Relative Density: 2.42

Water Solubility: Insoluble

Other Solubilities: Soluble in alkaline aqueous solutions or in HCL, H₂SO₄, and other strong acids in the presence of some water.

Partition coefficient: n-octanol/water; not applicable Auto-ignition Temperature: Does not ignite. Decomposition temperature: >200C

Viscosity: n/a

Section 10 - Stability and Reactivity

Reactivity: None known.

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

Possibility of hazardous reactions: No hazardous reactions known.

Conditions to avoid: Temperature >392°F (200°C).

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

Hazardous decomposition products: n/a

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Section 11- Toxicological Information

Information on the likely routes of exposure:

Eye contact: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat, and lungs.

Skin Contact: No known significant effects or critical hazards. **Ingestion:** No known significant effects or critical hazards.

Symptoms related to the physical, chemical, and toxicological characteristics:

Eye contact: Adverse symptoms may include irritation and redness.

Inhalation: Adverse symptoms may include respiratory tract irritation and coughing.

Skin Contact: No specific data.

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure: Short term exposure: Not available

Long term exposure: Not available

Potential delayed effects: Not available

Repeated dose toxicity: Carcinogenicity: No evidence of carcinogenic effects.

Mutagenicity: No evidence of any mutagenic effects.

Reproductive toxicity: No evidence of any reproductive toxicity effects.

Alumina Trihydrate is not listed as a carcinogen by NTP, IARC, OSHA, or ACGIH.

Section 12 - Ecological Information - Eco-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

Persistence and degradability: Not applicable for inorganic substances.

Bio-accumulative potential: Not applicable

Mobility in soil: Not applicable.

Results of PBT and vPvB assessment: This product does not meet the classification as PBT/vPvB. **Other adverse effects:** None known.

Section 13 - Disposal Considerations

Disposal: 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 Transportation Data (49 CFR 172.101): This product is not classified as dangerous under the transport regulations for road, rail, sea, or air transport.

UN Number: not classified as dangerous goods

UN proper shipping name: not classified as dangerous goods

Transport hazard classes: None

Packaging group: None

Environmental hazards: None

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Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: No hazardous goods.

Special precautions for user: None

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261.??): Not classified

CERCLA Hazardous Substance (40 CFR 302.4): not listed

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

SARA 311/312 Hazard: None

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910.????)

Proposition 65: Not listed

Inventory Lists: This product is listed on the following inventory lists:

International Regulations:

TSCA : Listed

Australia AICS: Listed

Canada DSL : Listed

China IECSC : Listed

Europe EINECS : 244-492-7

Japan ENCS : 1-17

Korea ECL : KE-00980

Malaysia: Listed

New Zealand NZIoC : Listed

Swiss Giftliste : G_4621

Philippines PICCS : Listed

Taiwan NECI : Listed

Canada WHMIS: Not Listed

Regulation (EC) No 2037/2000 (Ozone Depleting Substances); Not applicable

Regulation (EC) No 850/2004 (Persistent Organic Pollutants): Not applicable

Regulation (EC) No 689/2008 (Export and Import of Dangerous Substances): Not applicable

Directive 2002/95/EC (RoHS): Not applicable

Directive 2002/96/EC (WEEE): Not applicable

Directive 1999/13/EC (VOC): Not applicable

Restrictions according to TITLE VIII of the Regulation (EC) No 1907/2006

(REACH): None

S-phrases:

S8: Keep container dry.

S36/37/39: Wear suitable protective clothing, gloves, and eye protection.

WEEE: Waste Electrical and Electronic Equipment VOC: Volatile Organic Compounds

RoHS: Restriction of Hazardous Substances

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Section 16 - Other Information

Prepared By: Greg Loehr

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