Safety Data Sheet (SDS)

Revision / Review Date: 5/28/15

1. Chemical Product and Company Identification

Product Name:	ATH (A-202)
Distributed By:	HB Chemical 1665 Enterprise Parkway Twinsburg Oh 44087 Phone - 330-920-8023
SDS Prepared By (w Suppliers Input):	HB Chemical
Chemical Name / Family:	Alumina Trihydrate, Aluminum hydroxide.
Synonyms:	Aluminum hydroxide, aluminum trihydroxide, ATH; wet hydrates; dried hydrates; ground- and viscosity optimized hydrates; fine precipitated hydrates
Molecular Formula:	Not available
Molecular Weight via GPC, Mn:	Not available
Product Use:	Flame Retardants
OSHA Status:	Not available
CAS No:	21645-51-2
EU No:	244-492-7

For emergency health, safety, and environmental information, calls 330-920-8023
For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

2. Hazard(s) Identification

Warning:	Not available.
Signs and Symptoms of Exposure:	Irritation to the eyes, nose, throat and skin.
Primary Routes of Entry:	Inhalation, Eye and ingestion.
Medical Conditions Generally Aggravated by Exposure:	None known.
Precautionary statement:	In case of longer period or high level airborne dust respiratory truck mechanical irritation should be happened. Avoid breathing dust. Wear eye protection.
Eye Contact:	May cause irritation through mechanical abrasion.
Skin Contact:	May cause irritation through mechanical abrasion.
Ingestion:	May cause irritation to the digestive tract.
Inhalation:	Inhalation of high concentrations of this inert particulate can result in mild irritation of the respiratory tract.

HMIS Hazard Ratings:	Not available
HMIS limitation statement:	The HMIS hazard ratings numbers are meant to give a quick indication of the relative hazards associated with the product. All of the information contained in the SDS should be consulted to assist with the safe handling of this material.
Principal Hazardous Components:	OSHA - Respirable fraction: 5 mg/m3, Total dust: 15 mg/m3

3. Composition / Information on Ingredients

Weight Percent / Typical	Component Identity	CAS Registry Number
100%	Aluminum hydroxide	21645-51-2

4. First Aid Measures

Inhalation:	Move to fresh air. Consult physicians if necessary.
Eyes:	Rinse continuously with water for several minutes. Consult a physician if necessary.
Skin:	Mechanical (dry) removal, than rinsing with water.
Ingestion:	Rinse mouth and give plenty of water to drink. Consult physician if necessary.

5. Fire-Fighting Measures

Suitable Extinguishing Media:	Water Spray, Dry Chemical, Carbon Dioxide CO2, Foam.
Special Fire Fighting Procedures:	Do not release runoff from fire control methods to sewers or waterways. Fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus with a full face piece operated in pressure demand or positive pressure mode.
Hazardous Combustion Products:	None known.
Unusual fire and explosion hazards:	None known.

6. Accidental Release Measures

Steps to be taken in case material is spilled:	Avoid dust formation. In case of exposure to high level airborne dust wear a personal respirator in compliance the local bye-laws. The material can be taken up mechanically and disposed of observing the national regulations.
Environmental Disposal Information:	Avoid dispersal of spilled material and runoff. Avoid creating

	dusty conditions and prevent wind dispersal. Collect material for recycling if possible.
Waste Disposal:	Dispose in accordance with local and state laws.

7. Handling and Storage:

Empty Containers:	Not available.
Precautions to be taken in handling:	Handle in accordance with good industrial hygiene and safety practice. Wear suitable personal working cloth and protective equipment. Avoid dust formation. No special handling advice required. Eating, hygiene in work area: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Precautions against fire and explosion: The substance is inflammable and non-explosive.
Storage:	Store in a cool, dry, ventilated area. Keep containers closed when not in use. Do not store near extreme heat, open flame, or sources of ignition.

8. Exposure Controls / Personal Protection

Exposure Controls:	Not available.
Respiratory Protection:	In case of inadequate ventilation wear respiratory protection.
Ventilation:	Appropriate local exhaust ventilation is recommended.
Protective Gloves:	Wear protective gloves.
Eye Protection:	Safety glasses with side-shields.
Skin and Body Protection:	No special protective equipment required. Wearing of closed work clothing is recommended.
Other Precautions:	Handle in accordance with good industrial hygiene and safety practice.
Decontamination Facilities:	Eye bath, washing facilities (sinks / showers).

9. Physical and Chemical Properties

Physical Form:	Solid
Appearance & Odor:	White powder/ Odorless

Specific Gravity:	2.4
Softening Point, R&B:	Not available.
Melting Point:	300 °C at 1013 hPa
Solubility in Water:	Poorly soluble (water solubility 0.00009 g/L at 20°C)
Relative Density:	2.42 g/cm3 at 20°C
Flash Point, TAG CC F:	Not available.
Percent Volatiles (by weight):	Not available.
Decomposition temperature:	> 200 °C (H20 forming)
Evaporation Rate (Water ~ I):	Not available.
Vapor Pressure (mm Hg):	Not available.
Vapor Density (Air ~ I):	Not available.
Boiling Point (^{o}F) Initial:	2980 °C at 1013 hPa
Auto ignition Temperature, ^{o}C:	Not available.
Flammable Limits, %(V):	Not flammable

10. Stability and Reactivity

Stability:	This product is stable under normal conditions.
Incompatibility (Materials to Avoid):	Material reacts with strong acids and caustic solutions.
Conditions to Avoid:	None known.
Hazardous Polymerization:	Hazardous polymerization will not occur.

11. Toxicological Information

This material is not listed as a carcinogen or potential carcinogen by NTP, IARC, or OSHA.

OSHA Permissible Exposure Limit:	Respirable fraction: 5 mg/m3, Total dust: 15 mg/m3
ACGIH Threshold Limit Value:	Not available.
Acute Oral:	No bioaccumulation potential.
Acute Inhalation:	LD50 (rat) > 2000 mg/kg bw
Acute Dermal:	LC50 (4 hs) : > 2.3 mg/L air
Skin corrosion/irritation:	Not applicable.

Serious eye damage/irritation:	Not skin irritant.
Respiratory or skin irritation:	No effects apart from mechanical irritation.
Germ cell mutagenicity:	test substance is not a sensitizer.
Genetic toxicity:	Negative.
Reproductive toxicity:	No a systemic carcinogenic effect from exposure to aluminum hydroxide.
STOT-single exposure:	Negative. There is no evidence of any CMR effects.
STOT-repeated exposure:	NOAEL (chronic, rat) 30 mg Al/kg bw/day as aluminum citrate.
Aspiration hazard:	NOAEC (subchronic, rat) 70 mg A1/m3 as aluminum oxide.

12. Ecological Information

With regard to PBT and vPvB assessment Annex XIII of the REACH Regulation (EC) No. 1907/2006 is not applicable to inorganic substances. As aluminum metal, powders and oxide are not bio-available, owing to their extreme insolubility in water, and small bioaccumulation factors (<250), hence they do not fulfil either of the PBT and vPvB criteria for classification.

Fish (Salmo Trutta) toxicity:	LC/EC 50: > POOmg/1
Invertebrate (Daphnia Magna) toxicity:	LC/EC 50: > 100mg/1
Algae (Selenastrum Capricornutum) toxicity:	LC/EC 50: > 100mg/1
EC10/LC10 or NOEC for aquatic micro-organisms:	200 mg/L
Persistence and degradability:	Not applicable.
Bioaccumulative potential:	Not applicable for inorganic substance.
Mobility in soil:	Not applicable.

13. Disposal Considerations

If it is possible reuse or recycle. The waste can be handled according to the local bye-laws. Recycling of the used, fully emptied packaging according to the local bye-laws.

14. Transport Information

D.O.T. Shipping Name:	Nonhazardous material.
Air - ICAO (international Civil Aviation Organization):	Nonhazardous material.
Sea - IMDG (International Maritime Dangerous Goods):	Nonhazardous material.

15. Regulatory Information

All components of this material are on the TSCA Inventory.

All components of this material are on the Canadian DSL.

16. Other Information

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.