



# MATERIAL SAFETY DATA SHEET



NFPA	HMIS	PPE	Symbol(s)
		 Regulated	
Current Issue Date: January 24, 2014		Revision Number: 1	
<b>1. PRODUCT AND COMPANY IDENTIFICATION</b>			
<b>Product Name:</b>	Al+Clear® Poultry Grade Alum		
<b>Other/Generic Names:</b>	Aluminum Sulfate, Alum, Dry Alum		
<b>Recommended Use:</b>	Agricultural		
<b>Manufacturer:</b>	Chemtrade Solutions LLC 90 East Halsey Road Parsippany, NJ 07054		
<b>For More Information:</b>	Chemtrade Chemicals Canada Ltd. 90 East Halsey Road Parsippany, NJ 07054  Customer Service US ONLY: 800-631-8050 (Monday – Friday 9:00AM – 4:30PM)  Customer Service CANADA ONLY: 866-543-3896 (Monday – Friday 9:00AM – 4:30PM)		
<b>Emergency Telephone Number:</b>	US ONLY - CALL CHEMTREC: 800-424-9300 (24 Hours/Day, 7 Days/Week) OUTSIDE THE US – CALL CHEMTREC: 1-703-527-3887 (24 Hours/Day, 7 Days/Week) CANADA ONLY - CALL CANUTEC: 613-996-6666 (24 Hours/Day, 7 Days/Week)		
<b>2. HAZARDS IDENTIFICATION</b>			
<b>EMERGENCY OVERVIEW:</b> A white or creamy white granules or powder with a negligible odor. Can irritate the skin and eyes. May be harmful if swallowed. Not flammable, but may release toxic vapors if decomposed in a fire.			
<b>OSHA Status:</b>	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)		
<b>Potential Health Affects</b>			
<b>Skin:</b>	May cause skin irritation.		
<b>Eyes:</b>	May strongly irritate or burn the eyes.		
<b>Inhalation:</b>	Product mists may cause irritation to the respiratory tract.		
<b>Ingestion:</b>	May irritate the gastrointestinal tract. Concentrated solutions may cause burns to the digestive tract.		
<b>Delayed Effects:</b>	None known.		
<b>3. COMPOSITION/INFORMATION ON INGREDIENTS</b>			
<b>Component</b>	<b>CAS No</b>	<b>Weight %</b>	
Aluminum sulfate	10043-01-3	100	

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<b>4. FIRST AID MEASURES</b>	
<b>Eye Contact</b>	Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.
<b>Skin Contact</b>	Flush with plenty of water, removing contaminated clothing. If irritation develops, get medical attention.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get prompt medical attention.
<b>Ingestion</b>	Do not induce vomiting. Immediately give large quantities of water. Get medical attention immediately.
<b>Notes to Physician</b>	Treat symptomatically
<b>5. FIRE-FIGHTING MEASURES</b>	
<b><u>Flammable Properties</u></b>	
<b>FLASH POINT:</b>	Not Flammable
<b>FLASH POINT METHOD:</b>	Not Applicable
<b>AUTOIGNITION TEMPERATURE:</b>	Not Applicable
<b>UPPER FLAME LIMIT (VOLUME % IN AIR):</b>	Not Applicable
<b>LOWER FLAME LIMIT (VOLUME % IN AIR):</b>	Not Applicable
<b>FLAME PROPAGATION RATE (SOLIDS):</b>	Not Applicable
<b>OSHA FLAMMABILITY CLASS:</b>	Not Applicable
<b>SUITABLE EXTINGUISHING MEDIA:</b>	Water spray, foam, carbon dioxide or dry chemical
<b>UNSUITABLE EXTINGUISHING MEDIA:</b>	No information available
<b><u>Explosion Limits</u></b>	
<b>Hazardous Combustion Products</b>	No information available
<b>Impact sensitivity</b>	No information available
<b>Sensitivity to static discharge</b>	No information available
<b>Specific Hazards Arising from the Chemical</b>	Keep product and empty container away from heat and sources of ignition.
<b>Protective Equipment and Precautions for Firefighters</b>	Wear self-contained breathing apparatus (SCBA) and full protective equipment. Use water spray to keep containers cool.
<b>6. ACCIDENTAL RELEASE MEASURES</b>	
<b>IN CASE OF SPILL OR OTHER RELEASE</b>	Shovel up dry chemical and place in empty container and cover. Spray residue with plenty of water. Neutralize any further residue with alkali such as soda ash, lime or limestone. Adequate ventilation is required if soda ash or limestone is used, because of the consequent release of carbon dioxide gas. Collect liquid and/or residue and dispose of in accordance with applicable regulations.
<b>7. HANDLING AND STORAGE</b>	
<b>Handling</b>	Keep container tightly closed when not in use. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Remove contaminated clothing and wash thoroughly after handling.
<b>Storage</b>	Keep storage container tightly closed. Store in a cool, dry, well-ventilated area or cabinet. Isolate from incompatible substances. Store and ship in plastic or rubber-lined containers.

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<b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>					
<u>Component</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>Ontario TWA/EV</u>	<u>Mexico OEL (TWA)</u>	<u>NIOSH IDLH</u>
Aluminum sulfate	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>		TWA: 2 mg/m <sup>3</sup>	
<b>Engineering Measures</b>	Use local exhaust to keep airborne concentrations below the permissible exposure limits.				
<b>Personal Protective Equipment</b>					
<b>Eye/Face Protection</b>	Wear hard hat (or other head covering) and chemical safety goggles. Do not wear contact lenses.				
<b>Skin Protection</b>	Wear appropriate personal protective clothing to prevent skin contact. If prolonged or repeated contact is anticipated, all clothing should be impervious to liquid.				
<b>Respiratory Protection</b>	A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.				
<b>General Hygiene Considerations</b>	To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR 1910.132) be conducted before using this product. Eyewash and safety showers are recommended.				
<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>					
<b>Appearance</b>	White or creamy white granules or powder				
<b>Color</b>	White or creamy white				
<b>Chemical Formula</b>	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> *14H <sub>2</sub> O				
<b>Odor</b>	Negligible				
<b>Odor Threshold</b>	No information available				
<b>Physical State</b>	solid				
<b>pH</b>	3.5				
<b>Flash Point</b>	Not flammable				
<b>Autoignition Temperature</b>	Not applicable				
<b>Boiling Point/Range</b>	Not applicable				
<b>Melting Point/Range</b>	Not applicable				
<b>Flammability Limits in Air</b>	No information available				
<b>Explosive Properties</b>	No information available				
<b>Oxidizing Properties</b>	No information available				
<b>Evaporation Rate</b>	Not determined				
<b>Vapor Pressure</b>	Not applicable				
<b>Vapor Density</b>	Not applicable				
<b>Specific Gravity</b>	1.61				
<b>Partition Coefficient (n-octano/water)</b>	No information available				
<b>Viscosity</b>	No information available				
<b>Molecular Weight</b>	594 for Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> *14H <sub>2</sub> O				
<b>Water Solubility</b>	50% at 0°C				
<b>VOC Content (%)</b>	0				


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10. STABILITY AND REACTIVITY				
<b>Chemical Stability</b>	Normally stable. If evaporated to dryness, residue should not be exposed to elevated temperatures (above 760°C), as this will yield toxic and corrosive gases.			
<b>Conditions to Avoid</b>	Avoid temperatures above 760°C, as this will yield toxic and corrosive gases.			
<b>Incompatible Products</b>	Alkalis and water reactive materials such as oleum: causes exothermic reactions.			
<b>Hazardous Decomposition Products</b>	At elevated temperatures, sulfur oxides may be formed. These are toxic and corrosive and are oxidizers. Sulfur trioxide is also a fire hazard. The loss of these gases leaves a caustic residue.			
<b>Possibility of Hazardous Reactions</b>	Will not occur.			
11. TOXICOLOGICAL INFORMATION				
<b>Acute Toxicity</b>				
<b>Component Information</b>				
<b>Component</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>	
Aluminum sulfate	1930 mg/kg (rat) 6207 mg/kg (mouse)			
<b>Irritation</b>	No information available			
<b>Corrosivity</b>	No information available			
<b>Sensitization</b>	No information available			
<b>Chronic Toxicity</b>				
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.			
<b>Mutagenic Effects</b>	No information available			
<b>Reproductive Effects</b>	No information available			
<b>Developmental Effects</b>	No information available			
<b>Teratogenicity</b>	No information available			
<b>Target Organ Effects</b>	No information available			
<b>Other Adverse Effects</b>	No information available			
<b>Endocrine Disruptor Information</b>	No information available			
12. ECOLOGICAL INFORMATION				
<b>Ecotoxicity</b>				
Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.				
<b>Component</b>	<b>Freshwater Algae</b>	<b>Freshwater Fish</b>	<b>Microtox</b>	<b>Water Flea</b>
Aluminum sulfate		LC50 = 100 mg/L Carassius auratus 96 h LC50 = 37 mg/L Gambusia affinis 96 h		EC50 = 136 mg/L 15 min
<b>Persistence and Degradability</b>	No information available			
<b>Bioaccumulation</b>	No information available			
<b>Mobility in Environmental Media</b>	No information available			
<b>Other adverse affects</b>	<b>Aluminum sulfate component:</b> 14 ppm/36 hr/fundulus/fatal/fresh water; 240 ppm/48 hr/mosquito fish/TLm/water type not specified; TLm Mosquito fish, 235 ppm, 96 hours; LC50 Largemouth bass, 250 ppm, 96 hours			
13. DISPOSAL CONSIDERATIONS				
<b>Waste Disposal Methods</b>	Dispose of waste in accordance with all federal, state, and local regulations.			
<b>Contaminated Packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal.			

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14. TRANSPORT INFORMATION				
<b>DOT</b>	Regulated			
<b>Proper Shipping Name</b>	Environmentally hazardous substances, solid, n.o.s. (contains aluminum sulfate) (only if greater than 8700 lbs. in one package)			
<b>Hazard Class</b>	9			
<b>UN-No</b>	UN3077			
<b>Packing Group</b>	PGIII			
<b>TDG</b>	Regulated			
<b>Hazard Class</b>	9			
<b>UN-No</b>	UN3077			
<b>Packing Group</b>	PGIII			
15. REGULATORY INFORMATION				
<b>International Inventories</b>				
TSCA	Yes			
DSL	Yes			
ELINCS	No			
EINECS	Yes			
ENCS	Yes			
CHIINA	Yes			
KECL	Yes			
PICCS	Yes			
AICS	Yes			
<b>U.S. Federal Regulations</b>				
<b>SARA 313</b>				
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372: None				
<b>SARA 311/312 Hazardous Categorization</b>				
Chronic Health Hazard	No			
Acute Health Hazard	Yes			
Fire Hazard	No			
Sudden Release of Pressure Hazard	No			
Reactive Hazard	No			
<b>Clean Water Act</b>				
<b>Component</b>	<b>CWA – Reportable Quantities</b>	<b>CWA – Toxic Pollutants</b>	<b>CWA – Priority Pollutants</b>	<b>CWA – Hazardous Substances</b>
Aluminum sulfate	5000 lb			X
<b>CERCLA</b>				
<b>Component</b>	<b>CERCLA RQ (lb)</b>	<b>SARA TPQ (lb)</b>		
Aluminum sulfate	5000 lb			
<b>U.S. State Regulations</b>				
<b>California Proposition 65</b>				
This product does not contain any Proposition 65 chemicals.				

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<b>State Right-to-Know</b>					
<b>Component</b>	<b>Massachusetts</b>	<b>New Jersey</b>	<b>Pennsylvania</b>	<b>Illinois</b>	<b>Rhode Island</b>
Aluminum sulfate	X	X	X		
<b>Other International Regulations</b>					
Mexico	No information available				
Canada	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.				
<b>WHMIS Hazard Class</b>					
E Corrosive material					
D2B Toxic materials					
<b>16. OTHER INFORMATION</b>					
Current Issue Date:	January 24, 2014				
Previous Issue Date:	November 20, 2012				
Revision Summary:	Convert to GC Template				
<p><b>Disclaimer:</b>                      All information, statements, data, advice and/or recommendations, including, without limitation, those relating to storage, loading/unloading, piping and transportation (collectively referred to herein as "information") are believed to be accurate and reliable. However, no representation or warranty, express or implied, is made as to its completeness, accuracy, fitness for a particular purpose or any other matter, including, without limitation, that the practice or application of any such information is free of patent infringement or other intellectual property misappropriation. Chemtrade Logistics Inc. and its affiliates (collectively, "Chemtrade") are not engaged in the business of providing technical, operational, engineering or safety information for a fee, and, therefore, any such information provided herein has been furnished as an accommodation and without charge. All information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry. Chemtrade shall not be responsible or liable for the use, application or implementation of the information provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion, of such persons, their employees, advisors and agents.</p>					
<b>End of MSDS</b>					