



Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 11/21/14 Supersedes Date: 10/30/14

Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier
Product Form: Mixture
Product Name: Al+Clear® Plus
Intended Use of the Product

Poultry house ammonia control. Poultry litter acidification and pathogen growth inhibition.

Name, Address, and Telephone of the Responsible Party

Manufacturer

CHEMTRADE LOGISTICS INC. 155 Gordon Baker Road

Suite 300

Toronto, Ontario M2H 3N5 For SDS Info: (416) 496-5856 www.chemtradelogistics.com

Emergency Telephone Number

Emergency Number : Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC - Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Skin Corr. 1B H314 Eye Dam. 1 H318 Carc. 1A H350

Full text of H-phrases: see section 16

Label Elements GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H350 - May cause cancer

Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe fume, dust.

P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear eye protection, protective clothing, protective gloves. P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position

comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P310 - Immediately call a doctor, a POISON CENTER.

P321 - Specific treatment (see Section 4).

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P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US)

- 17 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
- 17 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
- 17 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS			
Name	Product identifier	% (w/w)	Classification (GHS-US)
Aluminum sulfate	(CAS No) 16828-12-9	10 - 30	Skin Irrit. 2, H315
			Eye Irrit. 2A, H319
			STOT SE 3, H335
			Aquatic Chronic 3, H412
Sulfuric acid	(CAS No) 7664-93-9	10 - 20	Skin Corr. 1A, H314
			Eye Dam. 1, H318
			Carc. 1A, H350
			Aquatic Acute 3, H402

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Immediately flush skin with plenty of water for at least 60 minutes.

Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes severe skin burns and eye damage. May cause cancer.

Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns. Causes severe respiratory irritation if inhaled. Symptoms may include burning of nose and throat, constriction of airway, difficulty breathing, and shortness of breath, bronchial spasms, chest pain, and pink frothy sputum.

Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns. Severe skin irritation, redness, dermatitis.

Eye Contact: Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder can cause severe eye irritation progressing to chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause cancer.

<u>Indication of Any Immediate Medical Attention and Special Treatment Needed</u>

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

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Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Not available

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products**: Forms aluminum oxide, sulfur dioxide and/or sulfur trioxide at temperatures above 760°C (1400°F) or when dry alum is encompassed in a fire involving other burning materials.

Other Information: Refer to Section 9 for flammability properties.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (dust, vapor, mist, gas).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Avoid generation of dust during clean-up of spills. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Use good housekeeping practices during storage, transfer, and handling, to avoid excessive dust accumulation. Protect from moisture.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong bases.

Specific End Use(s)

For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Sulfuric acid (7664-93-9)		
Mexico	OEL TWA (mg/m³)	1 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m³ (thoracic fraction)

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USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³
USA IDLH	US IDLH (mg/m³)	15 mg/m³
Alberta	OEL STEL (mg/m³)	3 mg/m³
Alberta	OEL TWA (mg/m³)	1 mg/m³
British Columbia	OEL TWA (mg/m³)	0.2 mg/m³ (Thoracic, contained in strong inorganic acid mists)
Manitoba	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic fraction)
New Brunswick	OEL STEL (mg/m³)	3 mg/m³
New Brunswick	OEL TWA (mg/m³)	1 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic fraction)
Nova Scotia	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic fraction)
Nunavut	OEL STEL (mg/m³)	3 mg/m³
Nunavut	OEL TWA (mg/m³)	1 mg/m³
Northwest Territories	OEL STEL (mg/m³)	3 mg/m³
Northwest Territories	OEL TWA (mg/m³)	1 mg/m³
Ontario	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic)
Prince Edward Island	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic fraction)
Québec	VECD (mg/m³)	3 mg/m³
Québec	VEMP (mg/m³)	1 mg/m³
Saskatchewan	OEL STEL (mg/m³)	0.6 mg/m³ (thoracic fraction)
Saskatchewan	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic fraction)
Yukon	OEL STEL (mg/m³)	1 mg/m³
Yukon	OEL TWA (mg/m³)	1 mg/m³

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing. **Materials for Protective Clothing:** Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use NIOSH-approved dust mask if dust has the potential to become airborne. **Environmental Exposure Controls:** Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties
Physical State : Solid

Appearance : Grey or brown granules

Odor Negligible **Odor Threshold** Not available < 1 @ 10% **Melting Point** Not available **Freezing Point** Not applicable **Boiling Point** Not applicable **Flash Point** Not applicable **Auto-ignition Temperature** Not applicable **Decomposition Temperature** Not available Flammability (solid, gas) Not flammable **Lower Flammable Limit** Not available

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Upper Flammable Limit: Not availableVapor Pressure: Not availableRelative Vapor Density at 20 °C: Not availableRelative Density: Not available

Specific Gravity : 0.95

Solubility: Water: 40 %Partition Coefficient: N-Octanol/Water: Not availableViscosity: Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact. Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials. Moisture.

Incompatible Materials: Strong bases.

Hazardous Decomposition Products: Oxides of aluminum. The decomposition products are corrosive and hazardous to health.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

pH: < 1@ 10%

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: < 1 @ 10%

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity:** May cause cancer.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns. Causes severe respiratory irritation if inhaled. Symptoms may include burning of nose and throat, constriction of airway, difficulty breathing, shortness of breath, bronchial spasms, chest pain, and pink frothy sputum.

Symptoms/Injuries After Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns. severe skin irritation, redness, dermatitis.

Symptoms/Injuries After Eye Contact: Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder can cause severe eye irritation progressing to chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause cancer.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sulfuric acid (7664-93-9)	
LD50 Oral Rat	2140 mg/kg
LC50 Inhalation Rat (mg/l)	510 mg/m³ (Exposure time: 2 h)

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Sulfuric acid (7664-93-9)	
IARC Group	1

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Sulfuric acid (7664-93-9)	
LC50 Fish 1	500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
LC 50 Fish 2	42 mg/l (Exposure time: 96 h - Species: Gambusia affinis [static])

Persistence and Degradability Not available

Bioaccumulative Potential

Sulfuric acid (7664-93-9)	
BCF Fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : CORROSIVE SOLIDS, N.O.S. (CONTAINS SULFURIC ACID)

Hazard Class : 8

Identification Number : UN1759

Label Codes: 8Packing Group: IIERG Number: 154

14.2 In Accordance with IMDG

Proper Shipping Name : CORROSIVE SOLID, N.O.S. (CONTAINS SULFURIC ACID)

Hazard Class : 8

Identification Number : UN1759

Packing Group : II
Label Codes : 8
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B



14.3 In Accordance with IATA

Proper Shipping Name : CORROSIVE SOLID, N.O.S. (CONTAINS SULFURIC ACID)

Packing Group : II

Identification Number : UN1759

Hazard Class : 8
Label Codes : 8
ERG Code (IATA) : 8L



14.4 In Accordance with TDG

(contains Sulfuric acid)

Proper Shipping Name : CORROSIVE SOLID, N.O.S. (CONTAINS SULFURIC ACID)

Packing Group : II Hazard Class : 8

Identification Number : UN1759

Label Codes : 8



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SECTION 15: REGULATORY INFORMATION

US Federal Regulations

OS rederal Regulations	
Al+Clear® Plus	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
	Immediate (acute) health hazard
Sulfuric acid (7664-93-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the United States SARA Section 302	
Listed on United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

US State Regulations

Al+Clear® Plus	

Sulfuric acid (7664-93-9)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.

Sulfuric acid (7664-93-9)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

Canadian Regulations

Al+Clear® Plus WHMIS Classification Class E - Corrosive Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects





Aluminum sulfate (16828-12-9)

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Sulfuric acid (7664-93-9)

Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification

Class E - Corrosive Material

Class D Division 2 Subdivision A - Very toxic material causing of

Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 11/21/14

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

4	Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
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Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H350	May cause cancer
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

Party Responsible for the Preparation of This Document

CHEMTRADE LOGISTICS, INC. For SDS Info: (416) 496-5856

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care TM .



Chemtrade North America SDS Template

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