

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015. Revision Date: 02/06/2020 Date of Issue: 09/15/2016

Version: 3.0

SECTION 1: IDENTIFICATION

Product Identifier Product Form: Mixture Product Name: Al+Clear®Xtra

Svnonvms: ACX

Intended Use of the Product

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

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 / US: CHEMTREC +1-800-424-9300 INTERNATIONAL: +1-703-741-5970 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

GHS Classification

Skin Irrit. 2 H315 Eye Dam. 1 H318 STOT SE 3 H335 H402 Aquatic Acute 3 Aquatic Chronic 3 H412

Full text of hazard classes and H-statements : see section 16

Label Elements

GHS Labeling

Hazard Pictograms



	GHS05 GHS07
Signal Word	: Danger
Hazard Statements	: H315 - Causes skin irritation.
	H318 - Causes serious eye damage.
	H335 - May cause respiratory irritation.
	H402 - Harmful to aquatic life.
	H412 - Harmful to aquatic life with long lasting effects.
Precautionary Statements	: P261 - Avoid breathing vapors, mist, or spray.
	P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
	P271 - Use only outdoors or in a well-ventilated area.
	P273 - Avoid release to the environment.
	P280 - Wear protective gloves, protective clothing, and eye protection.
	P302+P352 - IF ON SKIN: Wash with plenty of water.
	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for
	breathing.

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor.

P321 - Specific treatment (see section 4 on this SDS).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

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

Other Hazards

When mixed with water may form a corrosive mixture. Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown acute toxicity

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	%*	GHS Ingredient Classification
Aluminum sulfate	(CAS-No.) 16828-12-9	60 - 80	Skin Irrit. 2, H315
			Eye Irrit. 2A, H319
			STOT SE 3, H335
			Aquatic Acute 3, H402
			Aquatic Chronic 3, H412
Sodium bisulfate	(CAS-No.) 7681-38-1	20 - 40	Eye Dam. 1, H318

Full text of H-phrases: see section 16.

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

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 where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye damage. Causes skin irritation. May cause respiratory irritation.

Inhalation: Irritation of the respiratory tract and the other mucous membranes.

Skin Contact: Causes severe irritation. May cause burns or severe irritation in contact with water or moisture on skin. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None known.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

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

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

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: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Sulfur compounds. Sulfur oxides. Sodium oxides.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

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: Do not breathe dust. Do not get in eyes, on skin, or on clothing.

For Non-Emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing dust. Do not get in eyes, on skin, or on clothing.

Additional Hazards When Processed: May be corrosive to metal when wet.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

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

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Specific End Use(s)

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

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), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Al+Clear[®]Xtra

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Exposure Controls

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

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Wear suitable protective clothing.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Bas	sic Physical an	d Chemical Propertie	S
internation on bus	ne i nysieui un	a chemicari ropertie	

Physical State	:	Solid
Appearance	:	White to Off-White Crystalline Granules
Odor	:	Not available
Odor Threshold	:	Not available
рН	:	1.8 (5% Solution)
Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not applicable
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20°C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Water: Partially Soluble in Cold Water and Hot Water
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available

SECTION 10: STABILITY AND REACTIVITY

<u>Reactivity</u>: Hazardous reactions will not occur under normal conditions.

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

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

<u>Conditions to Avoid</u>: Extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Hazardous Decomposition Products: None expected under normal conditions of use.

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified Acute Toxicity (Dermal): Not classified Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation.

pH: 1.8 (5% Solution)

Eye Damage/Irritation: Causes serious eye damage.

pH: 1.8 (5% Solution)

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: Irritation of the respiratory tract and the other mucous membranes.

Symptoms/Effects After Skin Contact: Causes severe irritation. May cause burns or severe irritation in contact with water or moisture on skin. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Effects After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Effects After Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. **Chronic Symptoms:** None known.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium bisulfate (7681-38-1)

LD50 Oral Rat

2490 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

Sodium bisulfate (7681-38-1)

EC50 Daphnia 1	190 mg/l (Exposure time: 48 h - Species: Daphnia magna)			
Persistence and Degradability				
Al+Clear [®] Xtra				
Persistence and Degradability	May cause long-term adverse effects in the environment.			
Bioaccumulative Potential				
Al+Clear [®] Xtra				
Bioaccumulative Potential	Not established.			
Mobility in Soil				
Not available				

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1 In Accordance with DOT Not regulated for transport

14.2 In Accordance with IMDG Not regulated for transport

14.3 In Accordance with IATA Not regulated for transport

14.4 In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Aluminum sulfate (16828-12-9)	Not applicable	Not applicable	Not applicable	No
Sodium bisulfate (7681-38-1)	Not applicable	Not applicable	Not applicable	No

SARA 311/312

Al+Clear®Xtra

Immediate (acute) health hazard.

US TSCA Flags

Not present

US State Regulations

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Aluminum sulfate (16828-12-9)	No	No	No	No
Sodium bisulfate (7681-38-1)	No	No	No	No

State Right-To-Know Lists

Aluminum sulfate (16828-12-9)

U.S. - Massachusetts - Right To Know List - No

U.S. - New Jersey - Right to Know Hazardous Substance List - No

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No

U.S. - Pennsylvania - RTK (Right to Know) List - No

Sodium bisulfate (7681-38-1)

U.S. - Massachusetts - Right To Know List - No

U.S. - New Jersey - Right to Know Hazardous Substance List - No

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No

U.S. - Pennsylvania - RTK (Right to Know) List - No

Canadian Regulations

Aluminum sulfate (16828-12-9)

Not listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

Sodium bisulfate (7681-38-1)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia AICS	Turkey CICR	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EU NLP	Mexico INSQ
Aluminum sulfate (16828-12- 9)	No	No	No	No	No	No	No	No
Sodium bisulfate (7681-38-1)	Yes	Yes	Yes	Yes	No	No	No	Yes

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

						NZIOC	
Aluminum sulfate (16828-12- No 9)	No	No	No	No	Yes	Yes	No
Sodium bisulfate (7681-38-1) Yes	Yes	Yes	No	No	Yes	Yes	Yes

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

Date of Preparation or Latest Revision : 02/06/2020

Revision Summary

Section	Change	Date Changed
1	Language modified	02/06/2020
7	Language modified	02/06/2020
Other Information	: This document has been prepared in accordance with the	SDS requirements of the OSHA

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

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

NFPA 704

<u>NFPA 704</u>	
NFPA Health Hazard	: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
NFPA Fire Hazard	: 1 - Materials that must be preheated before ignition can occur.
NFPA Reactivity Hazard	: 0 - Material that in themselves are normally stable, even under fire conditions.
HMIS Rating	
Health	: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability	: 1 Slight Hazard
Physical	: 0 Minimal Hazard
PPE	See Section 8

Abbreviations and Acronyms

AICS – Australian Inventory of Chemical Substances	LC50 - Median Lethal Concentration
ACGIH – American Conference of Governmental Industrial Hygienists	LD50 - Median Lethal Dose
AIHA – American Industrial Hygiene Association	LOAEL - Lowest Observed Adverse Effect Level
ATE - Acute Toxicity Estimate	LOEC - Lowest-observed-effect Concentration
BCF - Bioconcentration factor	Log Pow - Octanol/water Partition Coefficient
BEI - Biological Exposure Indices (BEI)	NFPA 704 – National Fire Protection Association - Standard System for the
CAS No Chemical Abstracts Service number	Identification of the Hazards of Materials for Emergency Response
CERCLA RQ - Comprehensive Environmental Response, Compensation, and	NIOSH - National Institute for Occupational Safety and Health
Liability Act - Reportable Quantity	NLP - Europe No Longer Polymers List
CICR - Turkish Inventory and Control of Chemicals	NOAEL - No-Observed Adverse Effect Level

Safety Data Sheet

DOT – 49 CFR – US Department of Transportation – Code of Federal Regulations	NOEC - No-Observed Effect Concentration
Title 49 – Transportation.	NZIOC - New Zealand Inventory of Chemicals
EC50 - Median effective concentration	OEL - Occupational Exposure Limits
ECL - Korea Existing Chemicals List	OSHA – Occupational Safety and Health Administration
EINECS - European Inventory of Existing Commercial Chemical Substances	PEL - Permissible Exposure Limits
ELINCS - European List of Notified Chemical Substances	PICCS - Philippine Inventory of Chemicals and Chemical Substances
EmS - IMDG Emergency Schedule Fire & Spillage	PDSCL - Japan Poisonous and Deleterious Substances Control Law
ENCS - Japanese Existing and New Chemical Substances Inventory	PPE – Personal Protective Equipment
EPA – Environmental Protection Agency	PRTR - Japan Pollutant Release and Transfer Register
EPCRA 304 RQ – EPCRA 304 Extremely Hazardous Substance Emergency Planning	REL - Recommended Exposure Limit
and Community Right-to-Know-Act – Reportable Quantity	SADT - Self Accelerating Decomposition Temperature
ERAP Index – Emergency Response Assistance Plan Quantity Limit	SARA - Superfund Amendments and Reauthorization Act
ErC50 - EC50 in Terms of Reduction Growth Rate	SARA 302 - Section 302, 40 CFR Part 355
ERG code (IATA) - Emergency Response Drill Code as found in the International	SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories
Civil Aviation Organization (ICAO)	SARA 313 - Section 313, 40 CFR Part 372
ERG No Emergency Response Guide Number	SRCL - Specifically Regulated Carcinogen List
HCCL - Hazard Communication Carcinogen List	STEL - Short Term Exposure Limit
HMIS – Hazardous Materials Information System	SVHC – European Candidate List of Substance of Very High Concern
IARC - International Agency for Research on Cancer	TDG – Transport Canada Transport of Dangerous Goods Regulations
IATA - International Air Transport Association – Dangerous Goods Regulations	TLM - Median Tolerance Limit
IDLH - Immediately Dangerous to Life or Health	TLV - Threshold Limit Value
IECSC - Inventory of Existing Chemical Substances Produced or Imported in China	TPQ - Threshold Planning Quantity
IMDG - International Maritime Dangerous Goods Code	TSCA – United StatesToxic Substances Control Act
INSQ - Mexican National Inventory of Chemical Substances	TWA - Time Weighted Average
ISHL - Japan Industrial Safety and Health Law	WEEL - Workplace Environmental Exposure Levels

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^M.



Chemtrade NA GHS SDS 2015