



Certified to ANSI/NSF 60

Material Safety Data Sheet

Section 1 - Chemical Product and Company Information

PRODUCT NAME: Aluminum chlorhydrate solution

SYNONYMS:

Aluminum chlorohydrate; Aluminum chloride hydroxide; Aluminum

hydroxychloride; Aluminum chloride oxide; Aluminum chlorohydrol

SUPPLIER:

GEO Specialty Chemicals

ADDRESS:

9213 Arch Street Pike, Little Rock, AR 72206

NFPA Rating

HMIS Rating

HEALTH:

HEALTH:

FLAMMABILITY:

FLAMMABILITY:

REACTIVITY:

REACTIVITY:

EMERGENCY TELEPHONE NUMBER: CHEMTREC 1-800-424-9300

EMERGENCY OVERVIEW

Clear to slightly hazy, water-white to yellow liquid with no odor. May cause skin, eye and respiratory irritation.

Section 2 - Composition Information

INGREDIENTS Aluminum Chlorhydrate	<u>CAS NO.</u> 1327-41-9	<u>% WT/WT</u> 50%	PEL *15 mg/m^3 (TD) *5 mg/m^3 (RF)	TLV SOLUBLE SALTS: *2 mg/m^3 (TWA)
*Aluminum metal, (as Al) . Water	7732-18-5	50%	NTES	NTES

LISTED AS CARCINOGEN BY:

IARC: NO	NTP:	NO
OSHA: NO	ACGIH:	NO

PEL: STEL:	OSHA Permissible Exposure Limit Short Term Exposure Limit		Time Weighted Average, 8-hr ACGIH Threshold Limit	TD: ND:	Total dust Nuisance dust
HI:	Hazardous Ingredient	C.LIM:	Ceiling Limit	INP:	Inhalable Particulate
OM:	Oil mist	WF:	Wax fume	RF:	Respirable fraction

ST: Skin TWA

Section 3 - Hazards Identification

ROUTES OF EXPOSURE

INHALATION: Inhalation of mist or spray may irritate respiratory tract.

SKIN CONTACT: May cause skin irritation, especially on prolonged contact.

SKIN ABSORBTION: No Data

EYE CONTACT: Direct eye contact may cause irritation, redness, and swelling. Prolonged exposure to

Aluminum salts may cause conjunctivitis.

INGESTION: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

EFFECTS OF OVEREXPOSURE

ACUTE OVEREXPOSURE: Possible eye, skin and respiratory tract irritation.

CHRONIC OVEREXPOSURE: May aggravate existing skin, eye, and lung conditions. Persons with kidney

disorders have an increased risk from exposure based on general information

found on aluminum salts.

Section 4 - First Aid Measures

EYES: Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure

flushing of the entire surface. Washing within one minute is essential to achieve maximum

effectiveness. Seek medical attention.

SKIN: Wash thoroughly with soap and water, remove contaminated clothing and footwear. Wash

clothing before reuse. Get medical attention if irritation should develop.

INHALATION: Remove to fresh air.

INGESTION: Seek medical attention immediately. Give large amounts of water to drink. If vomiting

should occur spontaneously, keep airway clear. Never give anything by mouth to an

unconscious person.

NOTES TO PHYSICIAN: Aluminum soluble salts may cause gastroenteritis if ingested. Treatment includes the

use of demulcents. Note: Consideration should be given to the possibility that

overexposure to materials other an this product may have occurred.

Section 5 - Fire Fighting Measures

FLASHPOINT: NAPL <u>FLAMMABLE LIMITS IN AIR, % BY VOLUME:</u>

AUTOIGNITION TEMPERATURE: NAPL LOWER FLAMMABILITY LIMIT: NAPL

UPPER FLAMMABILITY LIMIT: NAPL

EXTINGUISHING MEDIA: Water Spray, Carbon Dioxide, Foam, Dry Chemical.

FIRE OR EXPLOSION HAZARDS: May produce hazardous fumes or hazardous decomposition products.

FIRE FIGHTING PROCEDURES: Product is a water solution and nonflammable. In a fire, this product may build

up pressure and rupture a sealed container; cool exposed containers with water spray. Use self-contained breathing apparatus in confined areas; avoid

breathing vapors or dust.

Section 6 - Accidental Release Measures

Stop leaks. Clean up spill immediately. Build dikes as necessary to contain flow of large spills. Do not allow liquid to enter stream or waterways. For small spills, use soda ash to neutralize, an inert material to absorb, or wash product to a chemical sewer. Place contaminated materials into containers and store in a safe place to await proper disposal. We ar adequate personal protective clothing and equipment. Caution use of soda ash may generate carbon dioxide gas. Provide adequate ventilation to spill area. Approved breathing apparatus may be necessary.

Section 7 - Handling and Storage

PRECAUTIONARY STATEMENTS:

CAUTION!

MAY CAUSE IRRITATION.

Avoid contact with eyes, skin, and clothing.

Avoid breathing mist or spray.

Wear chemical splash goggles, gloves, and protective clothing when handling.

Use with adequate ventilation and employ respiratory protection where mist or spray may be generated.

Wash thoroughly after handling.

May be harmful if swallowed or inhaled.

Keep away from heat and open flame.

Keep container closed when not in use.

FOR INDUSTRIAL USE ONLY.

HANDLING/STORAGE REQUIREMENTS:

Store in a cool, dry place away from direct heat. Keep container tightly closed when not in use. Do not store in unlined metal containers. Product may slowly corrode iron, brass, copper, aluminum and mild steel.

Section 8 - Exposure Controls/Personal Protection

VENTILATION REQUIREMENTS: Local exhaust ventilation recommended.

EYE PROTECTION: Chemical splash goggles and/or face shield.

SKIN PROTECTION: Chemical resistant gloves.

RESPIRATORY PROTECTION: When exposures exceed the PEL, use NIOSH/MSHA approved respirator in

accordance with OSHA Respiratory Protection Requirements under 29 CFR

1910.134.

OTHER REQUIRED EQUIPMENT: Standard work clothing and work shoes. Safety shower and eye wash

located in immediate area.

lb/gal

Section 9 - Physical and Chemical Properties

APPEARANCE:

Clear to slightly hazy, colorless to yellow liquid

ODOR:

Odorless

SOLUBILITY IN WATER:

Complete

pH:

3.5 (AS IS)

SPECIFIC GRAVITY (WATER=1):

1.33-1.35

DENSITY @ 25°C: MELTING POINT:

11.0-11.3

BOILING POINT:

VISCOSITY:

~220°F (104°C)

NAV

FREEZING POINT:

~19°F (-7°C)

EVAPORATION RATE:

NAV NAV

VAPOR PRESSURE:

NAV >100 VAPOR DENSITY (AIR=1): **VOLATILES BY WEIGHT:**

40-50%

Section 10 - Stability and Reactivity

STABLE:

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID:

NONE

IINCOMPATIBLE MATERIALS:

Product is incompatible with alkalis.

DECOMPOSITION PRODUCTS: Thermal decomposition may release toxic and/or hazardous gases such as

aluminum, Cl2, and HCl.

Section 11 Toxicological Information

Skin Irritation (human):

150 mg/3D-I Mild irritation effects (1)

(1) "Cutaneous Toxicity" Drill, V. A. and P. Lazar, eds., New York, NY, Academic Press, 1977

Section 12 - Ecological Information

BOD5:

mg 02/mg:

NAV

ppm:

NAV

Biodegradable, %:

NAV

BOD28:

mg 02/mg:

NAV

ppm:

NAV

Biodegradable, %:

NAV

COD:

mg 02/mg:

NAV

ppm:

NAV

Biodegradable, %:

NAV

Aquatic Toxicity:

Not Available

Section 13 - Disposal Considerations

Dispose of in accordance with all applicable federal, state and local regulations.

Section 14 - Transportation Information

DOT Proper Shipping Name:

NOT APPLICABLE, NOT RESTRICTED

Harmonized Tariff Schedule Number:

2827.49.50.00

Section 15 - Regulatory Information

This product does not contain any ingredients subject to the reporting requirements of SARA Title III, Section 313 (40 CFR Part 372).

SARA Section 311/312: Acute Health Hazard. TSCA: Components found in TSCA Inventory.

Section 16 - Other Information

PREPARER'S NAME:

Michael R. Oldfield

PREPARER'S TITLE:

Enhanced Aluminum Products Manager

PREPARER'S TELEPHONE NUMBER:

(501) 888-1211

REFERENCE NUMBER:

3204H

LAST REVISION DATE:

4/13/00

The information herein is given in good faith but no warranty, expressed or implied, is made.

Legend

NAV = Not Available; NAPL = Not Applicable; NTES = None Established; TRSC = Trade Secret