



MATERIAL SAFETY DATA SHEET

098347-00 Gordon

ALUMINUM CHLOROHYDRATE SOLUTION

SECTION 1 - CHEMICAL AND COMPANY IDENTIFICATION

- **SUBSTANCE:** ALUMINUM CHLOROHYDRATE 50% SOLUTION
- **TRADE NAME:** ACHIEVE L1050
- **MOLECULAR FORMULA:** $Al_2(OH)_5Cl \cdot xH_2O$
- **MANUFACTURER:** Gulbrandsen Technologies, Inc.
INDIA: Plot No. 761/A, Jhagadia Industrial Estate, GIDC Jhagadia, Dist. Bharuch, Gujarat, India
Phone: +912645 226767 Fax: +912645 226767

USA: 183 Gulbrandsen Road, Orangeburg, SC 29115
Phone: 803-531-2413 Fax: 803-536-5977

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	Percent	EINECS/ELINCS
12042-91-0	ALUMINUM CHLOROHYDRATE	45 - 50	234-933-1

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

POTENTIAL HEALTH EFFECTS

- **EYE CONTACT:** May cause mild irritation and redness.
- **SKIN CONTACT:** Skin contact may cause irritation. Skin may dry or crack due to astringent nature of material.
- **INGESTION:** Effects of very small amounts are negligible; large amounts may cause injury. May cause burning pain in mouth and throat. Wash mouth with water immediately. Seek medical attention.
- **INHALATION:** Although unlikely to occur, inhalation may result in an adverse reaction to persons previously sensitized to the material.

SECTION 4 - FIRST AID MEASURES

- **EYE:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
- **SKIN:** Immediately flush skin with plenty of water for at least 15 minutes. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing & shoes before reuse. Get medical attention.
- **INGESTION:** Do not induce vomiting. Never give anything by mouth to an unconscious person. If large quantity of this material is swallowed, call a physician immediately.
- **INHALATION:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen.



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SECTION 5 - FIRE FIGHTING MEASURES

- GENERAL INFORMATION: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Cool exposed tanks with water.
- SPECIAL FIRE HAZARDS: In case of fires, hazardous chlorine compounds are formed: Hydrogen Chloride (HCl)
- EXTINGUISHING MEDIA: Product itself is non-combustible..
- FLASH POINT: Not available
- FLAMMABLE LIMIT: Not available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- GENERAL INFORMATION: Use proper personal protective equipment as indicated in section 8.
- SPILLS/LEAKS: Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch or walk through spilled material.
- SMALL SPILLS: Dike ahead of liquid spill for later disposal. Prevent entry into waterways, sewers, basement or confined areas. Surface may become slippery after spillage.
- METHOD OF CLEANING UP/TAKING UP: Pump up large quantities. Pick up rest with absorbent material (e.g. sand, saw dust etc.)

SECTION 7 - HANDLING AND STORAGE

- HANDLING: Avoid contact with eyes. Wash thoroughly after handling. As with all chemicals, good industrial hygiene practice should be followed when handling this material. Avoid freezing or excessive heat.
- STORAGE: Store in cool, dry place. Store in a tightly closed container.

SECTION 8 - EXPOSURE CONTROL, PERSONAL PROTECTION

- EXPOSURE LIMITS: The ACGIH TLV for soluble aluminum salts is 2 mg/m³ as Al (8 hours time weighted average)
 - ENGINEERING CONTROLS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
- PERSONAL PROTECTIVE EQUIPMENT:
- EYES: Wear safety glasses and chemical goggles if splashing is possible.
 - SKIN: Wear appropriate protective gloves and PVC clothing to prevent skin exposure.
 - RESPIRATORS: Wear a NIOSH/MSHA or European Standard EN 149 approved full-face piece Airline respirator/organic vapor/mist respirator.
 - OTHER PROTECTIVE MEASURES: Employees must practice good personal hygiene, washing exposed areas of skin several times daily and laundering contaminated clothing before re-use.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- COLOR: Clear, colorless, free from foreign particulate solution
- ODOR: odorless
- SPECIFIC GRAVITY: 1.330 TO 1.350
- VISCOSITY: Not applicable
- pH VALUE: 4.0 - 4.4 (30% w/w aqueous, 15% solids)
- SOLUBILITY IN WATER: soluble in water
- VAPOR PRESSURE: Not available
- EVAPORATION RATE: 50 - 75% (water)

SECTION 10 - STABILITY AND REACTIVITY

- CHEMICAL STABILITY: Stable under normal conditions
- INCOMPATIBILITIES WITH OTHER MATERIALS: Not known
- HAZARDOUS DECOMPOSITION: Will not occur
- HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11 - TOXICOLOGY INFORMATION

- LD50/LC50: Not available
- CARCINOGENIC & MUTAGENIC EFFECT: Not available
- CHRONIC EFFECTS ON HUMANS: Repeated or prolonged exposure is not known to aggravate medical condition.

SECTION 12 - ECOLOGICAL INFORMATION

- BIODEGRADABILITY: Not degradable
- FISH TOXICITY: Not available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of container and unused contents in accordance with federal, state and local requirements. Characterization and compliance with applicable laws are the responsibility solely of the generator

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SECTION 14 - TRANSPORT INFORMATION

- DOT CLASSIFICATION: Not a DOT controlled material (USA)
- ADR: Not restricted
- ADNR: Not restricted
- RID: Not restricted
- IATA: Not restricted
- IMDG: Not restricted

SECTION 15 - REGULATORY INFORMATION

- LABELING IN ACCORDANCE WITH EC - DIRECTIVES: The product does not require a hazard warning label in accordance with EC directives.
- RISK PHRASES: Not found
- SAFETY PHRASES: Not found

SECTION 16 - ADDITIONAL INFORMATION

- The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Gulbrandsen Technologies (I) Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Gulbrandsen Technologies (I) Pvt. Ltd. has been advised of the possibility of such damages.