



## MATERIAL SAFETY DATA SHEET

### IDENTIFICATION

SUBSTANCE: **POLYALUMINUM CHLOROSULFATE SOLUTION**

CAS #: 39290-78-3

MANUFACTURER: Gulbrandsen Technologies, Inc.  
2 Main Street  
Clinton, NJ 08809

PRODUCT INFORMATION: (908) 735-5458

TRANSPORTATION EMERGENCY  
(CHEMTREC): (800) 424-9300

REVISION DATE: 12/01/2002  
SUPERSEDES: 07/29/2002

### INGREDIENTS

<u>INGREDIENT</u>	<u>CAS #</u>	<u>PERCENTAGE</u>
Water	7732-18-5	60 - 75
Aluminum chloride hydroxide sulfate	39290-78-3	25 - 50

### PHYSICAL DATA

BOILING POINT: 100°C  
MELTING POINT: -12°C  
SPECIFIC GRAVITY: 1.19 - 1.21  
% VOLATILE: 60-75 (water)  
VAPOR DENSITY: Air=1, N/F<sup>1</sup>  
ODOR: None

pH: Approx. 3  
SOLUBILITY IN WATER: Complete  
VAPOR PRESSURE: 20mm Hg @ 35°C  
EVAPORATION RATE: N/F<sup>1</sup>  
APPEARANCE: Slightly yellow liquid

### FIRE AND EXPLOSION HAZARDS

FLASH POINT: N/A<sup>2</sup>  
FLAMMABLE LIMITS IN AIR: UFL: N/A LFL: N/A (% BY VOLUME)  
SPECIAL FIRE AND EXPLOSION HAZARDS: None  
EXTINGUISHING MEDIA: Will not burn; use materials appropriate for surrounding fire.  
SPECIAL FIRE FIGHTING INSTRUCTIONS: Cool exposed tanks with water.

### REACTIVITY

STABILITY: Stable  
DECOMPOSITION: Will not occur  
POLYMERIZATION: Will not occur  
INCOMPATIBILITY: Reacts with caustic, evolving heat and precipitating aluminum hydroxide.

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## HEALTH HAZARDS

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**EXPOSURE LIMITS:** Not specifically regulated as toxic or hazardous by OSHA.  
The ACGIH TLV for soluble aluminum salts is 2 mg/m<sup>3</sup> as Al (8 hour time-weighted average).

**CARCINOGENICITY:** **None of the components of this material are listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.**

### FIRST AID

**EYE:** Immediately flush eyes for 15 minutes with plenty of water. Call a physician.

**SKIN:** Flush skin with water. Remove contaminated clothing; wash before reuse.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**INGESTION:** **DO NOT INDUCE VOMITING.** Give large quantities of water, then an antacid. Never give anything by mouth to an unconscious individual. Call a physician.

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## PERSONAL PROTECTION

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Adequate general ventilation should be provided to keep vapor and mists below exposure limits.

Wear safety glasses with side shields. Wear a face shield if possibility of material splashing or spraying exists. Where there is possibility of skin contact, use the following as appropriate: gloves impervious to material, apron, boots, hood, pants and jacket. Wear a NIOSH/OSHA approved respirator with a dust/mist cartridge if there is potential of exposure to mists in excess of applicable limits.

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## SPILL/LEAK PROCEDURE

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Review safety precautions before proceeding with cleanup. Use appropriate personal protection equipment.

Dike area around spill to prevent spreading, and use absorbent material to pick up spill.

**DISPOSAL:** Under the Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine whether a substance should be classified as a hazardous waste at the time of disposal. This is due to the fact that product use, transformation, synthesis, mixtures, etc. may change the nature of the product. Dispose of waste in accordance with applicable federal, state, and local laws.

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## SHIPPING INFORMATION

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### DOT

**PROPER SHIPPING NAME:** Corrosive liquid, acidic, inorganic, n.o.s.  
(aluminum hydroxide chloride)

**HAZARD CLASS:** Class 8

**UN/NA #:** UN 3264

**DOT LABELS:** Corrosive

**DOT PLACARDS:** Corrosive

**PACKING GROUP:** III

### IMO

**PROPER SHIPPING NAME:** Corrosive liquid, acidic, inorganic, n.o.s.  
(aluminum hydroxide chloride)

**HAZARD CLASS:** Class 8

**UN/NA #:** UN 3264

**DOT LABELS:** Corrosive

**DOT PLACARDS:** Corrosive

**PACKING GROUP:** III

**REPORTABLE QUANTITY:** N/A

**SHIPPING CONTAINERS:** Rubber-lined steel tank cars/trucks; polyethylene drums, bottles

STORAGE CONDITIONS: Keep containers closed

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TITLE III HAZARD CLASSIFICATIONS

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ACUTE: Yes  
CHRONIC: No  
FIRE: No  
REACTIVITY: No  
PRESSURE: No

EXTREMELY HAZARDOUS SUBSTANCE: No  
TOXIC CHEMICAL: No

NFPA/HMIS RATINGS:                   HEALTH: 1  
  FLAMMABILITY: 0  
  REACTIVITY: 0

Personal protection rating to be supplied by user depending on use conditions.

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ADDITIONAL INFORMATION AND REFERENCES

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<sup>1</sup>N/F = None found

<sup>2</sup>N/A = Not applicable