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0228146-003  
4-23-04

## MATERIAL SAFETY DATA SHEET

### IDENTIFICATION

SUBSTANCE: **POLYALUMINUM CHLORIDE SOLUTION**

CAS#: 1327-41-9

MANUFACTURER: Gulbrandsen Technologies  
2 Main Street  
Clinton, NJ 08809

PRODUCT INFORMATION: (908) 735-5458

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

REVISION DATE: 12/01/2002  
SUPERSEDES: 07/31/2002

### INGREDIENTS

INGREDIENT	CAS #	PERCENTAGE
Water	7732-18-5	60 - 75
Polyvalent aluminum compound	1327-41-9	25 - 40

### PHYSICAL DATA

BOILING POINT: 100°C

MELTING POINT: -15°C

SPECIFIC GRAVITY: 1.18 - 1.25

% VOLATILE: 60 - 75 (water)

VAPOR DENSITY: Air=1, N/F<sup>1</sup>

APPEARANCE: Colorless to yellow liquid

pH (15% w/w): 2.3 - 2.9

SOLUBILITY IN WATER: Complete

VAPOR PRESSURE: 20mm Hg @35°C

EVAPORATION RATE: N/F<sup>1</sup>

ODOR: None

### FIRE AND EXPLOSION HAZARDS

FLASH POINT: N/A<sup>2</sup>

FLAMMABLE LIMITS IN AIR: UFL: N/A LFL: N/A

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:** The ACGIH TLV for 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

**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.  
**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.

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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 (such as neoprene or nitrile gloves), 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.  
(Polyaluminum chloride solution)  
**HAZARD CLASS:** Class 8  
**UN/NA #:** UN 3264  
**DOT LABELS:** Corrosive  
**DOT PLACARDS:** Corrosive  
**PACKAGING GROUP:** III  
**REPORTABLE QUANTITY:** N/A  
**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