

# MATERIAL SAFETY DATA SHEET

## ALUMINUM CHLORIDE SOLUTION-TG

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MANUFACTURER:** Distributed by Tarr, LLC  
P. O. Box 12570  
Portland, OR 97212

**INFORMATION PHONE:** 503-288-5294

**EMERGENCY PHONE:** **CHEMTREC 800-424-9300 (US) Day or night**  
International Call Collect CHEMTREC 202-483-7616

**PRODUCT NAME:** **ALUMINUM CHLORIDE SOLUTION-TG**

**PRODUCT NUMBER:** ACS

**UPC NUMBER:**

**PREPARED BY:** Patricia Rodabaugh

**DATE PREPARED:** 3/23/2004

**LAST REVISION:** 3/25/2003

**SYNONYMS:** Aluminum Chloride Solution-Tech Grade



Portland, Oregon  
Phoenix, Arizona  
Auburn, Washington  
Vancouver, Washington

**Print Date:** 10/13/2004

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %	OSHA PEL	ACGIH TLV	NOTE
Aluminum Chloride	007446-70-0	18-22			

### 3. HAZARDOUS IDENTIFICATION

**EMERGENCY OVERVIEW:** DANGER! Corrosive material. Colorless and odorless liquid. Avoid contact with skin or eyes. Avoid breathing vapor. May cause serious burns which may not be immediately painful or visible.

#### POTENTIAL HEALTH EFFECTS

**EYE CONTACT:** May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Mists may cause eye irritation.

**INHALATION:** Excessive exposure may cause irritation to upper respiratory tract and lungs.

**INGESTION:** May cause burns of the mouth and throat. Ingestion may cause gastrointestinal irritation and ulceration.

**SKIN CONTACT:** Exposure may cause skin burns. A single prolonged skin exposure is not likely to result in absorption of harmful amounts.

#### SIGNS AND SYMPTOMS OF EXPOSURE:

Contact may cause severe eye irritation, burns to mouth and throat, skin burns and upper respiratory tract irritation tract and lungs.

### 4. FIRST AID MEASURES

**EYE CONTACT:** Immediate and continuous irrigation with flowing water for at least 30 minutes is imperative. Prompt medical consultation is essential.

**INHALATION:** Remove to fresh air if effects occur. Consult a physician.

**INGESTION:** If swallowed, do NOT induce vomiting. Give victim large amounts of water or milk if available and transport to medical facility.

**SKIN CONTACT:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse. Destroy contaminated shoes.

**AGGRAVATED MEDICAL CONDITIONS:**

Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Impaired function from preexisting disorders may be aggravated by exposure to this product.

**SUPPLEMENTAL HEALTH INFORMATION:**

Note to Physician: May cause burns. May tissue destruction/stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgement of the physician in response to reactions of the patient.

## **5. FIRE FIGHTING MEASURES**

### **FLAMMABLE PROPERTIES**

**FLASH POINT:** none

**FLASH POINT METHOD USED:** N/A

**AUTOIGNITION:** N/A

**LEL:**

**UEL:**

**EXTINGUISHING MEDIA:**

This material does not burn. If exposed to fire from another source, use suitable extinguishing agent for that fire.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece in positive pressure mode. Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant clothing with SCBA. This will not provide sufficient fire protection, consider fighting fire from a remote location. For protective equipment in post-fire or non-fire clean up situations, refer to the relevant sections. Move containers from fire area if it can be done without risk.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

See Incompatibility Section. ACGIH TLV is 2 mg/m<sup>3</sup> for soluble salts of aluminum. ACGIH TLV and OSHA PEL are 5 ppm ceiling for hydrogen chloride.

**COMBUSTION PRODUCTS:**

May release acid fumes in fire.

## **6. ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:**

Clear area of unauthorized personnel. Wear protective equipment as given in Section 8. Acidic (equiv. to Approx. 5% HCL). Clear non-emergency personnel from area. Use vacuum truck. Dilute with water. Dispose of properly. Do not dump into sewers, on the ground or into any body of water.

## **7. HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

ACGIH TLV is 2 mg/m<sup>3</sup> for soluble salts of aluminum. ACGIH TLV and OSHA PEL are 5 ppm ceiling for hydrogen chloride. Aluminum chloride hydrolyzes to hydrogen chloride.

**OTHER PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, organic materials or other incompatible materials.

## **8. EXPOSURE CONTROL/PERSONAL PROTECTION**

**RESPIRATORY PROTECTION:**

Atmospheric levels should be maintained below the exposure guideline. If exposure may or does exceed occupational exposure limits (Sec. 2) use a NIOSH approved respirator to prevent exposure. If respiratory irritation is experienced, use an approved air-purifying respirator. If vapor exposure causes eye discomfort, use a full-face respirator.

**VENTILATION:**

Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

**PROTECTIVE GLOVES:**

Use protective gloves impervious to this material. Safety shower should be located in immediate work area. Remove contaminated gloves immediately, wash skin area with soap and water and launder clothing before reuse. Contaminated leather items, such as shoes, belts and watchbands should be removed and destroyed.

**EYE PROTECTION:**

Use chemical safety goggles. Wear a face-shield which allows use of chemical goggles, or wear a full-face respirator to protect face and eyes when there is any likelihood of splashes or if vapor exposure causes eye discomfort. Eye wash fountain should be located in the immediate work area, and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:**

Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water and launder clothing before reuse. Contaminated leather items, such as shoes, belts and watchbands should be removed and destroyed.

**WORK / HYGENIC PRACTICES:**

Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

**ENGINEERING CONTROLS:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**EXPOSURE GUIDELINES:**

May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**SOLUBILITY IN WATER:** Soluble

**APPEARANCE AND ODOR:** Clear to white to yellow liquid, odor not available.

<b>BOILING POINT:</b>	>212 F	<b>PERCENT VOLATILE:</b>	0
<b>VAPOR PRESSURE:</b>	>20 mm @ 20 C	<b>PH:</b>	
<b>EVAPORATION RATE:</b>	Slower than ether	<b>MOLECULAR WEIGHT:</b>	NDA
<b>POUNDS PER GALLON:</b>	10.36	<b>VAPOR DENSITY:</b>	Same as water.
<b>SPECIFIC GRAVITY:</b>	1.19	<b>OTHER PROPERTIES:</b>	
<b>MELTING POINT:</b>	NDA		
<b>FREEZING POINT:</b>	NDA		

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Stable except as noted below.

**INCOMPATIBILITY:**

Reacts with caustic, evolving heat and precipitating aluminum hydroxide. Also reacts with iron and aluminum.

**HAZARDOUS DECOMPOSITION OR BY PRODUCTS:**

May release acid fumes in fire.

**HAZARDOUS POLYMERIZATION:** Will Not Occur

**CONDITIONS TO AVOID:** None identified.

## 11. TOXICOLOGY INFORMATION

ACGIH TLV is 2 mg/m<sup>3</sup> for soluble salts of aluminum. ACGIH TLV and OSHA PEL are 5 ppm ceiling for hydrogen chloride.

## 12. ECOLOGICAL INFORMATION

Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented.

## 13. DISPOSAL CONSIDERATIONS

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Tarr, Inc. has no control over the management practices or manufacturing processes of parties handling or using this material. The information presented here pertains only to the product as shipped in its intended conditions as described in MSDS section 2 (Composition/information

## 14. TRANSPORTATION INFORMATION

**DOT Proper Shipping Name:** Aluminum Chloride, Solution

**PACKING GROUP:** III

**GUIDE NUMBER:** 154

**HAZARD CLASS:** 8

**DOT CLASS:** Corrosive Liquid

**UN NUMBER:** UN 2581

## 15. REGULATORY INFORMATION

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

## 16. OTHER INFORMATION

**HMS INFORMATION:** **HEALTH:** 2 **FLAMMABILITY:** 1 **REACTIVITY:** 0 **PROTECTIVE:** X

### SARA Title III Information:

**SARA 302:** To the best of our knowledge, this product is not listed as an extremely hazardous substance.

**SARA 311/312:** To the best of our knowledge, this product should be reported as an immediate health hazard and a delayed health hazard.

**SARA 313:** To the best of our knowledge, this product is not listed as a toxic chemical.

**N/A = Not Applicable**

**NDA = No Data Available**

### Disclaimer

This information contained herein is based on the data available to us and is believed to be accurate. However, Tarr Acquisition, LLC (Tarr, LLC) makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Tarr, LLC assumes no responsibility for injuries from the use of the product described herein.