

# Safety Data Sheet



Issue Date 2/22/2005

Revision Date 5/4/2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

Product Name ACP 27

### Other means of identification

SDS# ADVCHEM189

UN/ID No UN2581

### Recommended use of the chemical and restrictions on use

Recommended Use General Chemical

### Details of the supplier of the safety data sheet

#### Supplier Address

Advanced Chemical Systems  
9640 S 60<sup>th</sup> St  
Franklin, WI 53132

### Emergency Telephone Number

Company Phone Number 1-414-235-3246 (Phone)  
(M-F 8:00-4:30) 1-414-235-3179 (Fax)

Emergency Telephone INFOTRAC 1-352-323-3500 (International)  
(24 Hr) 1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

### Classification

Corrosive to metals; Category 1; May be corrosive to metals.;  
Acute toxicity (Oral); Category 4; Harmful if swallowed.;  
Skin irritation; Category 2; Causes severe skin burns and eye  
damage.; Serious eye damage; Category 1; Causes serious  
eye damage.;

### Signal Word

Danger

## Hazard Statements



A clear to pale yellow liquid with negligible odor. Can irritate or cause burns to skin and eyes. May be harmful if swallowed. Not flammable, but may release toxic vapors if decomposed in a fire.

**Appearance:**

Clear Solution

**Physical State:**

Liquid

**Odor:**

Negligible

## Precautionary Statements-Prevention

Wear protective gloves, protective clothing, eye protection and face protection. Do not breathe spray mist.

## Precautionary Statements-Response

**IF IN EYES:**

Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.

**IF ON SKIN(or hair) :**

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation develops, get medical attention.

**IF INHALED:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get prompt medical attention.

**IF SWALLOWED:**

Do not induce vomiting. Immediately give large quantities of water. Get medical attention immediately.

## Precautionary Statements-Storage

Keep container tightly closed when not in use. Store in cool, dry, well - ventilated area or cabinet. Isolate from incompatible substances. Protect from physical damage. Protect from freezing.

### Precautionary Statements-Disposal

Dispose of waste in accordance with all federal, state, and local regulations. Empty containers should be taken for local recycling, recovery or waste disposal.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Common Name** Salt Solution  
**Chemical Family** Inorganic Salt

Chemical Name	CAS No.	Weight by %
Aluminum Chloride	7446-70-0	Proprietary

\*\*The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret

### 4. FIRST-AID MEASURES

#### First Aid Measures

**General Advice** Ensure that medical personnel are aware of the material involved and take precautions. Show safety data sheet.

**Eye Contact** Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.

**Skin Contact:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation develops, get medical attention.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get prompt medical attention.

**Ingestion** Do not induce vomiting. Immediately give large quantities of water. Get medical attention immediately.

#### Most Important Symptoms and Effects

**Symptoms** May cause severe reddening and swelling. May irritate or burn the eyes. Product mists may cause irritation to the respiratory tract. May irritate and gastrointestinal tract. Concentrated solutions may cause burns to the digestive tract.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### Suitable Extinguishing Media

Product is not flammable. Use extinguishing measures appropriate to local circumstances and environment.

### Unsuitable Extinguishing Media

No information available.

### Specific Hazards Arising from the Chemical

At elevated temperatures, fumes may contain hydrochloric acid.

### Hazardous Combustion Products

No information available.

### Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus (SCBA) and full protective equipment. Use water spray to keep containers cool.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### **Personal Precautions**

Good general ventilation, safety goggles, appropriate chemical resistant clothing. Respirator if mist formation.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information. See Section 13, Disposal Considerations, for additional information.

### Methods and material for containment and cleaning up

#### **Methods for Containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for Clean-Up**

Dilute small spills or leaks cautiously with plenty of water. Contain large spills with clay or other inert materials. If permitted by regulation, neutralize with alkali. Carbon dioxide may evolve if neutralized with carbonates (e.g. soda ash). Collect liquid and/or residue and dispose of accordance with applicable regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on Safe Handling**

Keep container tightly closed when not in use. Avoid contact with skin, eyes, and clothing. Avoid breathing mists or vapors. Remove contaminated clothing and wash thoroughly after

handling. Use with adequate ventilation. Handle as a material of moderate oral toxicity. Do not smoke or eat while handling. Use good housekeeping and personal hygiene. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep storage container tightly closed. Store in a cool, dry, well-ventilated area or cabinet. Isolate from incompatible substances. Protect from physical damage. Protect from freezing.

**Incompatible Materials** Alkalis and water reactive materials.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum Chloride	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	None Listed

**Appropriate engineering controls**

**Engineering Controls** Use local exhaust to keep airborne concentrations below the permissible exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear chemical Safety goggles or face shield. Do not wear contact lenses.

**Skin and Body Protection** Wear appropriate personal protective clothing to prevent skin contact. If prolonged or repeated contact is anticipated, all clothing should be impervious to liquid

**Respiratory Protection** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

**General Hygiene Considerations**

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR 1910.132) be conducted before using this product. Eyewash and safety showers are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid
<b>Odor</b>	Slightly Acidic
<b>Appearance</b>	Colorless to dark yellow
<b>Odor Threshold</b>	No Information Available
<b>Color</b>	Colorless to dark yellow

<u>Property</u>	<u>Values</u>	<u>Remarks . Method</u>
<b>pH</b>	0.5-1.5	
<b>Melting/Freezing Point</b>	-34°C /-30°F	
<b>Boiling Point/Boiling Range</b>	110°C / 230°F	
<b>Flash Point</b>	Not Flammable	
<b>Evaporation Rate</b>	None Determined	
<b>Flammability (Solid, Gas)</b>	Not Flammable	
<b>Upper Flammability Limits</b>	Not Applicable	
<b>Lower Flammability Limit</b>	Not Applicable	
<b>Vapor Pressure</b>	< 5mm Hg @20°C %	
<b>Vapor Density</b>	Not Applicable	
<b>Specific Gravity</b>	1.28	
<b>Water Solubility</b>	Complete	
<b>Partition Coefficient</b>	No Information Available	
<b>Autoignition Temperature</b>	No Information Available	
<b>Decomposition Temperature</b>	No Information Available	
<b>Kinematic Viscosity</b>	No Information Available	
<b>Dynamic Viscosity</b>	No Information Available	
<b>Explosive Properties</b>	No Information Available	
<b>Oxidizing Properties</b>	No Information Available	

## 10. STABILITY AND REACTIVITY

<b><u>Reactivity</u></b>	Not available.
<b><u>Chemical Stability</u></b>	Normally stable.
<b><u>Possibility of Hazardous Reactions</u></b>	
<b>Hazardous Polymerization</b>	Will not occur.

<b><u>Conditions to Avoid</u></b>	Avoid high temperatures.
<b><u>Incompatible Materials</u></b>	Rapidly corrodes most metals; may generate flammable, potentially explosive hydrogen gas.
<b><u>Hazardous Decomposition Products</u></b>	At elevated temperatures, hydrogen chloride gas may be formed.

**11. TOXOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Product Information</b>	Acute Toxicity
<b>Eye Contact</b>	May irritate or burn the eyes.
<b>Skin Contact</b>	May cause severe reddening and swelling.
<b>Inhalation</b>	Product mists may cause irritation to the respiratory tract.
<b>Ingestion</b>	May irritate the gastrointestinal tract. Concentrated solutions may cause burns to the digestive tract.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum Chloride	3450 gm/kg (rat) 1130 mg/kg (mouse)	2,000 g/kg (rabbit)	Not Listed

**Information on physical, chemical and toxicological effects**

<b>Symptoms</b>	Please see section 4 of this SDS for symptoms.
<b><u>Delayed and immediate effects as well as chronic effects from short and long term exposure</u></b>	
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.
<b><u>Numerical measures of toxicity</u></b>	No Information Available

**12. ECOLOGICAL INFORMATION**

<b><u>Ecotoxicity</u></b>	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
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### Component Information

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
Aluminum Chloride	EC50= 2500 mg/L 72h	LC50 = 2010mg/L Gambusia affinis 96h LC50=8.6 mg/L Oncorhynchus mykiss 96hr	Not Listed	EC50= 3.0mg/L 48h LC50=3.9 mg/L 48hr

**Persistence/Degradability** No Information Available.

**Bioaccumulation** No Information Available.

**Mobility** No Information Available.

**Other Adverse Effects** No Information Available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

**Disposal of Wastes** Dispose of waste in accordance with all federal, state, and local regulations.

**Contaminated Packaging** Empty containers should be taken for local recycling, recovery, or waste disposal.

#### California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Aluminum Chloride	Non Hazardous

### 14. TRANSPORTATION INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT** Regulated  
**UN/ID No** UN2581  
**Proper Shipping Name** Aluminum Chloride, solution  
**Hazard Class** 8  
**Packing Group** PGIII  
**Reportable Quantity (RQ)** Not Listed

<b>IATA</b>	
<b>UN/ID No</b>	Not Listed
<b>Proper Shipping Class</b>	Not Listed
<b>Hazard Class</b>	Not Listed
<b>Packing Group</b>	Not Listed

<b>IMDG</b>	
<b>UN/ID No</b>	Not Listed
<b>Proper Shipping Name</b>	Not Listed
<b>Hazard Class</b>	Not Listed
<b>Packing Group</b>	Not Listed

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Yes
<b>Legend:</b>	
<b>TSCA:</b>	<i>United States Toxic Substances Control Act Section 8(b) Inventory</i>
<b>DSL/NDSL:</b>	<i>Canadian Domestic Substances List/Non-Domestic Substances List</i>
<b>EINECS/ELINCS:</b>	<i>European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances</i>
<b>ENCS:</b>	<i>Japan Existing and New Chemical Substances</i>
<b>IECSC:</b>	<i>China Inventory of Existing Chemical Substances</i>
<b>KECL:</b>	<i>Korean Existing and Evaluated Chemical Substances</i>
<b>PICCS:</b>	<i>Philippines Inventory of Chemicals and Chemical Substances</i>

### US Federal Regulations

#### CERCLA

None of the chemicals in this material have a Reportable Quantity.

### SARA 311/312 Hazard Categories

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemicals which are subject to the reporting

requirements of Act and Title 40 of the Code of Federal Regulations, Part 372: None

**CWA (Clean Water Act)**

None of the chemicals in this product are listed as hazardous substances under the CWA.

**US State Regulations**

This product does not contain any Proposition 65 chemicals.

**California Proposition 65**

None of the chemicals in this product are listed.

**U.S. State Right-to-Know Regulations**

Not present on state lists for NJ, MA, PA, or RI.

**16.OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>2</b>	<b>Flammability</b>	<b>0</b>	<b>Instability</b>	<b>0</b>	<b>Special Hazards</b>	<b>None</b>
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>2</b>	<b>Flammability</b>	<b>0</b>	<b>Instability</b>	<b>0</b>	<b>Personal Protection</b>	<b>C</b>

**Issue Date** 2/22/2005  
**Revision Date** 4/1/2015  
**Revision Note**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**