



# Material Safety Data Sheet

Issuing Date December 15, 2009

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Revision Number 05

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** AC-®130 Part A  
**Product Code(s)** AC-130 Part A  
**UN-No** 2789  
**Recommended Use** Metal adhesion promoter .  
**Company** Advanced Chemistry & Technology, Inc.  
7341 Anaconda Avenue  
Garden Grove, CA 92841  
**Company Emergency Phone Number** 714-373-2837 (8 AM to 5 PM Pacific)  
**Emergency Telephone Number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**DANGER!**

### Emergency Overview

Corrosive

FLAMMABLE LIQUID AND VAPOR

Severe eye irritation

The product causes burns of eyes, skin and mucous membranes

May cause skin irritation and/or dermatitis

**Appearance** Clear

**Physical State** Liquid

**Odor** Of vinegar

### Potential Health Effects

**Principle Routes of Exposure** Eye contact, Skin contact, Inhalation

### Acute Toxicity

**Eyes**

Corrosive to the eyes and may cause severe damage including blindness.

**Skin**

Contact causes severe skin irritation and possible burns. May cause sensitization by skin contact.

**Inhalation**

Harmful by inhalation. Causes burns. Avoid breathing vapors or mists. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Ingestion**

Ingestion causes burns of the upper digestive and respiratory tract. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

### Chronic Effects

Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen.

### Main Symptoms

Skin disorders. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

### Aggravated Medical Conditions

Skin disorders. Respiratory disorders. Mucous membrane.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Acetic acid	64-19-7	100

#### 4. FIRST AID MEASURES

<b>General Advice</b>	Immediate medical attention is required.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician immediately.
<b>Inhalation</b>	Move to fresh air. Call a physician immediately. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician immediately. Drink 1 or 2 glasses of water.
<b>Notes to Physician</b>	Effects of contact or inhalation may be delayed. Treat symptomatically.
<b>Protection of First-aiders</b>	Avoid contact with skin, eyes and clothing. Remove all sources of ignition.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash Point Method</b>	39 °C / 102.2 °F Closed cup
<b>Suitable Extinguishing Media</b>	Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.
<b>Hazardous Combustion Products</b>	Carbon oxides, Carbon monoxide, Carbon dioxide (CO <sub>2</sub> )
<b>Explosion Data</b>	
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>NFPA</b>	<b>Health Hazard</b> 3* <b>Flammability</b> 2 <b>Stability</b> 0 <b>Physical and Chemical Hazards</b> N/A

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak.
<b>Methods for Containment</b>	Dike far ahead of spill to collect runoff water. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
<b>Methods for Cleaning Up</b>	Soak up with inert absorbent material. Clean contaminated surface thoroughly.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Keep away from open flames, hot surfaces and sources of ignition. Do not breathe vapors or spray mist. Ensure adequate ventilation.
<b>Storage</b>	Keep at temperatures between 5°C and 32°C. Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetic acid 64-19-7	= 15 ppm STEL TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m <sup>3</sup>	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>

**Engineering Measures**                      Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations.

### Personal Protective Equipment

<b>Eye/Face Protection</b>	Safety glasses with side-shields. If splashes are likely to occur, wear.. Face-shield.
<b>Skin and Body Protection</b>	Wear protective gloves/clothing. Long sleeved clothing. Chemical resistant apron. Protective gloves.
<b>Respiratory Protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hygiene Measures**                      Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear	<b>Odor</b>	Of vinegar
<b>Physical State</b>	Liquid 2.4	<b>Method</b>	Closed cup
<b>Flash Point</b>	39 °C / 102.2 °F	<b>Boiling Point/Range</b>	117.8 °C
<b>Autoignition Temperature</b>	426 °C	<b>Flammability Limits in Air</b>	
<b>Freezing Point</b>	16.7 °C	<b>Upper</b>	19.9%
		<b>Lower</b>	4%
<b>Explosion Limits</b>	No information available		
<b>Specific Gravity</b>	1.05	<b>Water Solubility</b>	Miscible with water
<b>Solubility</b>	Soluble in water	<b>Evaporation Rate</b>	1.34 (n-butyl acetate=1)
<b>Vapor Pressure</b>	11.4 mmHg @ 77°F	<b>Vapor Density</b>	2.11
<b>Density</b>	1.05 g/cc	<b>Weight per Gallon (lbs)</b>	8.75
<b>Actual VOC (lb/gal)</b>	8.82	<b>EPA VOC (lb/gal)</b>	8.82
<b>EPA VOC (g/l)</b>	1050	<b>Viscosity</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Incompatible Products</b>	Bases. Water. Strong oxidizing agents.
<b>Conditions to Avoid</b>	Heat, flames and sparks. Burning produces obnoxious and toxic fumes. Heating can release hazardous gases.

**Hazardous Decomposition Products** Carbon oxides. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**Hazardous Reactions** None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetic acid	3310 mg/kg ( Rat )	1060 mg/kg ( Rabbit )	11.4 mg/L ( Rat ) 1 h

### Chronic Toxicity

**Chronic Toxicity** Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Acetic acid		LC50= 75 mg/L Lepomis macrochirus 96 h LC50= 88 mg/L Pimephales promelas 96 h	EC50 = 8.8 mg/L 15 min EC50 = 8.8 mg/L 25 min EC50 = 8.8 mg/L 5 min	EC50 = 95 mg/L 24 h

Chemical Name	Log Pow
Acetic acid	= -0.31 20 °C

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method** Dispose of in accordance with local regulations. Dispose of contents/container in accordance with local regulation.

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

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Acetic acid - 64-19-7				

Chemical Name	California Hazardous Waste Status
Acetic acid	Toxic; Corrosive; Ignitable

## 14. TRANSPORT INFORMATION

### DOT

**Proper Shipping Name** Acetic Acid, Glacial  
**Hazard Class** 8  
**Subsidiary Class** 3

UN-No 2789  
 Packing Group II  
 Reportable Quantity (RQ) 5000 lb

**IATA**

UN-No 2789  
 Proper Shipping Name Acetic Acid, Glacial  
 Hazard Class 8  
 Subsidiary Class 3  
 Packing Group II  
 ERG Code 132

**IMDG/IMO**

Proper Shipping Name Acetic Acid, Glacial  
 Hazard Class 8  
 Subsidiary Class 3.3  
 UN-No 2789  
 Packing Group II  
 EmS No. F-E, S-C

## 15. REGULATORY INFORMATION

**International Inventories**

TSCA Complies  
 DSL Complies  
 EINECS/ELINCS Complies  
 ENCS Complies  
 IECS Complies  
 KECL Complies  
 PICCS Complies  
 AICS Complies

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Acute Health Hazard Yes  
 Chronic Health Hazard Yes  
 Fire Hazard Yes  
 Sudden Release of Pressure Hazard No  
 Reactive Hazard No

**Clean Water Act**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Acetic acid 64-19-7 ( 100 )	5000 lb			X

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Acetic acid	64-19-7	100		Group II		

**CERCLA**

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Acetic acid	5000 lb	

**U.S. State Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acetic acid	X	X	X		X

**International Regulations**

**Mexico - Grade** Serious risk, Grade 3

Chemical Name	Carcinogen Status	Exposure Limits
Acetic acid		Mexico: TWA= 10 ppm Mexico: TWA= 25 mg/m <sup>3</sup> Mexico: STEL= 15 ppm Mexico: STEL= 37 mg/m <sup>3</sup>

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

B3 Combustible liquid

E Corrosive material

D2A Very toxic materials



## 16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol

Health Hazard	<b>3</b>
Fire Hazard	<b>2</b>
Reactivity	<b>0</b>

*\*Indicates a chronic health hazard.*

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Director of R&D

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**Revision Note** (M)SDS sections updated. 1. 16.

**Disclaimer**

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of MSDS**