Advanced Chemical Technology Inc.

CL-130

SAFETY DATA SHEET

Version 1.0
Effective Date: 06/01/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	CL-130
Description:	Descaling Compound
Suggested Use:	Industrial Water Treatment
Restrictions on Use:	Do not mix with other industrial chemicals
Supplier:	Advanced Chemical Technology, Inc. 8728 Utica Avenue Rancho Cucamonga, CA 91730
Telephone:	1-909-980-4556 or 1-800-632-1777
Fax:	1-909-980-9366
Emergency Phone:	1-800-255-3924 (CHEMTEL)

2. HAZARDS IDENTIFICATION

Classification

GHS Classification:
Skin Irritation (Category 2)
Eye Irritation (Category 2A)
Acute Toxicity, Oral (Category 4)
Harmful to aquatic life with long lasting effects (Category 3)

GHS Label Elements

Pictogram:

Signal Word: Warning

Hazard Statements:
H302: Harmful if swallowed
H315: Causes mild skin irritation
H319: Causes eye irritation

Precautionary Statements:
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P304+P340: IF INHALED: Remove to fresh air and keep comfortable for breathing
P303+P361+P353: IF ON SKIN OR HAIR: Remove all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P313: Get medical attention.

HMIS Classification:

Health Hazard:	3
Flammability:	0
Physical Hazards:	1

NFPA Rating:

Health Hazard:	3
Fire:	0
Reactivity Hazard:	1

Potential Health Effects

Inhalation:	May irritate the nose, throat and respiratory tract. Symptoms can include sore throat, coughing and shortness of breath. In severe cases, pulmonary edema may occur that could potentially lead to death.
Skin:	This product can cause irritation of the skin with pain, itching and redness. Depending on the duration of skin contact, skin overexposures may cause chemical burns resulting in blistering of skin and possible scarring. Repeated skin overexposures can result in dermatitis.
Eyes:	Exposure to particulates or solution of this product may cause redness, pain and blurred vision. Prolonged contact may cause corneal injury.
Ingestion:	May cause gastrointestinal irritation with symptoms such as nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Concentration
Sulfamic Acid	5329-14-6	99%

Synonyms:

4. FIRST AID MEASURES

If Inhaled:	If not breathing, give artificial respiration. Consult a Physician.
Skin Contact:	Immediately remove contaminated clothing and shoes, wash before reuse. Flush all affected areas with large amounts of water for at least 15 minutes.
Eye Contact:	Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Obtain medical attention immediately.
If Ingested:	Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water (If available, give several glasses of milk). If vomiting occurs spontaneously, keep airway clear and give more water. Consult a physician immediately.

5. FIREFIGHTING MEASURES

Flammability Overview:	May release sulfur dioxide, sulfur trioxide, and ammonia during a fire.
Flash Point:	Not Applicable
Extinguishing Media:	Water-spray, foam, carbon dioxide or dry chemical for fires in storage areas.
Special Protective Equipment for Firefighters:	Wear a self-contained breathing apparatus (SCBA) for firefighting if necessary.
Hazardous Combustion Products:	Decomposes with heat at 480 F to release sulfur dioxide, sulfur trioxide, nitrogen, and ammonia gases.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Use personal protective equipment. Wear goggles, rubber boots, and gloves.
Environmental Precautions:	Prevent from entering drains and waterways. Discharge into the environment must be avoided.

Containment and Clean Up: Sweep up or vacuum material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. If assistance is needed call CHEMTEL or emergency services.

7. HANDLING AND STORAGE

Safe Handling: Use personal protective equipment. Avoid breathing dust.

Safe Storage: Keep containers tightly closed in a dry well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Component	CAS Number	Exposure Limit	Basis
Sulfamic acid	5329-14-6	Not Established	ACGIH Threshold Value (TLV)
		Not Established	TWA (Respirable fraction)
		Not Established	NIOSH Recommended Exposure Limits

Personal Protective Equipment

Eye Protection: Wear tightly fitting safety goggles or safety glasses with a full-face shield. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH. Have eye-wash stations available where eye contact can occur.

Hand Protection: Handle with chemical-resistant gloves. Gloves must be inspected prior to use. Dispose of contaminated gloves. Wash and dry hands after use.

Skin Protection: Wear complete suit protection against chemicals, including chemical-resistant boots. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Safety showers should be located in the work area where skin contact can occur.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a NIOSH-approved full-face respirator with appropriate cartridges. For high concentrations, unknown concentrations, and for oxygen deficient atmospheres, use a NIOSH approved air-supplied respirator. Respiratory protection may be needed for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA 29 CFR 1910.134.

General Controls: Always ensure adequate ventilation and that working areas contain safety showers and eye wash stations. Handle material in accordance with good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Small granules or crystals
Color: White
Odor: Odorless
Odor Threshold: Not Applicable

pH:	1.18 in 1% aqueous solution
Melting/Freezing Point:	753.8°F / 393°F
Boiling Point:	Not Established
Flash Point:	Not Established
Evaporation Rate:	Not Applicable
Flammability (solid, gas):	Not Established
Flammability/Explosion Limits:	Not Established
Vapor Pressure @ 20°C:	Not Applicable
Vapor Density:	Not Applicable
Specific Gravity:	2.125
Density:	Not Established
Solubility in Water:	17.5% by wt. @ 68°F
Partition Coefficient:	Not Established
Autoignition Temperature:	Not Established
Decomposition Temperature:	408.2 °F
Viscosity:	Not Established

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable when dry
Conditions and Materials to Avoid:	Avoid dispersion of Sulfamic Acid particulates into air and contact with heat.
Hazardous Decomposition Products:	Decomposes with heat at 480 F to release sulfur dioxide, sulfur trioxide, nitrogen, and ammonia gases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	CAS Number	Test	Toxicity
Sulfamic Acid	5329-14-6	Oral LD50 (Rat)	3160 mg/kg
		Dermal LD50	Not Established
		Inhalation LD50 (Mouse)	1312 mg/kg

Potential Health Effects

Inhalation:	Dust is irritating to upper respiratory passages and mucous membranes
Skin:	May cause irritation or redness on contact with skin. May cause a more serious response if confined to the skin or if the skin is abraded.
Eyes:	Dust can be irritating or damaging to the eyes.
Ingestion:	This material is irritating to the mouth and the throat.
Signs and Symptoms of Exposure:	Not Established
Chronic Effects of Long-term Exposure:	Primary irritant dermatitis. Prolonged contact may result in destruction of tissue.
Carcinogenicity:	No component of this product at levels greater than 0.1% is identified as carcinogenic by IARC, ACGIH, or OSHA.

12. ECOLOGICAL INFORMATION

Acute Ecotoxicity

Component	CAS Number	Organism	Ecotoxicity
Sulfamic Acid	5329-14-6	Fathead minnow	96 hours: 58.8 – 84 mg/mL, fresh water

Ecological Effects

Persistence and Degradability: Not Established

Bioaccumulation Potential: Not expected to bio-accumulate

Mobility in Soil: Not Established

Other Adverse Effects: Not Established

13. DISPOSAL CONSIDERATIONS

Disposal: Surplus and non-recyclable material should be treated as hazardous waste and be disposed of by a licensed disposal company. Material should be disposed in accordance with all local, state, and federal regulations. Regulations vary by region. Do not release into sewers or waterways.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT Information

Proper Shipping Name: Corrosive, solid, n.o.s. (sulfamic acid)
UN Number: 2967
Hazard Class: 8
Packing Group: III

Reportable Quantity (RQ): Not Established

Marine Pollutant:

Note: Regulated for both bulk and non-bulk.

15. REGULATORY INFORMATION

US Federal

SARA 302 Components: This product does not contain a Section 302 listed hazardous substance for emergency planning notification/threshold planning quantities.
SARA 311/312 Hazards: Acute Health Hazard
SARA 313 Components: This product does not contain a Section 313 listed toxic chemical subject to release reporting requirements.

TSCA Inventory: All chemical components are listed on TSCA Inventory.

European Union

EC Inventory: Not Established

State Regulations

CA Prop 65: This product does not contain chemicals currently on the California list of known carcinogens and/or reproductive toxins.

16. OTHER INFORMATION

SDS Version: 1.0
Revision Date: 06/01/2015
Disclaimer: The information contained in this document was carefully compiled and is believed to be accurate. The information represents the present state of our knowledge and is applicable to the product with the regard to appropriate safety precautions. However, it does not represent any guarantee of the properties of the product. Advanced Chemical Technology, Inc. shall not be held liable for any damages resulting from handling or from contact with the above product. It is the responsibility of the purchaser to determine the suitability of the product for their particular purposes. Nothing contained herein shall be construed to be a recommendation to use, or as a license to operate under, or to infringe any existing patents. For product information call Advanced Chemical Technology, Inc., 1-909-980-4556.