Product ACS-CLN-120
Revision Date 5/22/2015
Revision 1

Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name ACS-CLN-120
Identifier Uses Inhibited Hydrochloric Acid.

Supplier
Advanced Chemical Service Inc.
3410 La Sierra Ave.#F271
Riverside, CA 92503
Tel: 800-319-9227

Contact Person 800-319-9227 / www.advancedchemicalservice.com
Emergency Telephone 24-HOUR EMERGENCY TELEPHONE: INFOTRAC: 1-800-535-5053 INTERNATIONAL#: 1-352-323-3500

SECTION 2: HAZARDS IDENTIFICATION

Appearance Clear, reddish-brown liquid.
Color Clear, reddish-brown liquid.
Odor Pungent.

Pictogram(s)

Signal Word Danger

Hazard Statements
H332 Harmful if inhaled.
H314 Causes severe skin burns and eye damage

Precautionary Statements
P280 Wear protective gloves/ protective clothing/eye protection/face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately 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.
P310 Immediately call a POISON CENTER or doctor/physician
P271 Use only outdoors or in a well-ventilated area.

Contains
2-butoxyethanol
prop-2-yn-1-ol
hydrogen chloride

GHS Classification
Physical and Chemical Hazards: Not classified
Human Health: Acute Tox 4 - H332, Skin Corr. 1A - H314
Environment: Not classified

OSHA Regulatory Status This product is Hazardous under the OSHA Hazard communication Standard.

Inhalation
Inhalation of product mists, vapors, fog and other airborne forms of any particle size may cause irritation to mucous membranes and respiratory tract. Symptoms of exposure may include nasal discomfort and coughing. High or prolonged inhalation exposure may lead to corrosion of mucous membranes with temporary lung irritation and cough, difficulty breathing, shortness of breath and/or pulmonary edema. Gross exposure may cause death. Avoid contact.

Ingestion
Exposure to liquid product may cause severe irritation and possible burns to inner linings of mouth, esophagus and gastrointestinal tract. Gross ingestion may cause death. Do NOT

ingest.

Skin contact Exposure to liquid product may cause severe irritation to skin, and possible burns. Symptoms of exposure may include redness, swelling or pain. Depending on the length of exposure and amount of acid, effects could include dermatitis, permanent scarring or death. Avoid contact.

Eye contact Exposure to liquid product or product vapor may cause severe irritation to eyes, and possibly burns or eye damage. Symptoms of exposure may include redness, swelling, tearing or pain. Splashed liquid may cause permanent blindness. Avoid contact.

Routes of Exposure No Information available.

SECTION 3: Composition/Information on Ingredients

Composition Comments Confidential business information has been removed without affecting the overall safety information on the safety data sheet.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General Information General first aid, rest, warmth and fresh air.

Inhalation If this product is inhaled, move the exposed person to fresh air promptly. Seek medical attention if symptoms persist. Check for breathing and pulse. If breathing is difficult, give oxygen (six liters per minute). If breathing has stopped, give artificial respiration. Keep the exposed person warm and at rest.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. If this product is ingested, give the exposed person plenty of water and seek medical attention promptly. Have the exposed person lie down and keep warm. Give the exposed person large amounts of water. Give the exposed person at least one ounce of milk of magnesia or aluminum hydroxide gel in an equal amount of water. If unavailable, give the white of two (2) or three (3) eggs. Never give anything by mouth to an unconscious person.

Skin contact If this product contacts the skin, immediately flush the affected area with plenty of clean running water for at least fifteen (15) minutes. If the product penetrates the clothing, promptly remove the contaminated clothing or shoes, and flush the affected area as described. Seek medical attention if irritation persists. Keep affected area cool.

Eye contact If the product contacts the eyes, immediately flush eyes with plenty of clean running water for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Remove contact lenses if worn. Do NOT try to neutralize the acid. Seek medical attention if irritation persists. Apply cool packs on eyes while transporting victim to medical facility.

Most important symptoms and effects, both acute and delayed

General Information

Inhalation Inhalation of product mists, vapors, fog and other airborne forms of any particle size may cause irritation to mucous membranes and respiratory tract. Symptoms of exposure may include nasal discomfort and coughing. High or prolonged inhalation exposure may lead to corrosion of mucous membranes with temporary lung irritation and cough, difficulty breathing, shortness of breath and/or pulmonary edema. Gross exposure may cause death. Avoid contact.

Ingestion Exposure to liquid product may cause severe irritation and possible burns to inner linings of mouth, esophagus and gastrointestinal tract. Gross ingestion may cause death. Do NOT ingest.

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Eye contact Exposure to liquid product or product vapor may cause severe irritation to eyes, and possibly burns or eye damage. Symptoms of exposure may include redness, swelling, tearing or pain. Splashed liquid may cause permanent blindness. Avoid contact.

Routes of Exposure No Information available.

Most important symptoms and effects, both acute and delayed

Notes To The Physician Treat Symptomatically.

SECTION 5: Firefighting Measures

Auto Ignition Temperature (°C) No Information available.
Flammability Limit - Lower (%) No Information available.
Flammability Limit - Upper (%) No Information available.
Flash point No Information available.

Extinguishing Media Use dry chemical, foam or carbon dioxide to extinguish fire. Water is NOT recommended as adding water to acid can generate large amounts of heat.

Hazardous combustion products Combustion may lead to the release of oxides of hydrogen and hydrogen chloride.

Unusual Fire & Explosion Hazards May generate flammable, potentially explosive hydrogen gas on contact with most metals. Explosive concentrations of hydrogen may accumulate inside metal equipment. Hydrochloric acid fumes may be released from heating under fire conditions.

Special Fire Fighting Procedures Use water to cool containers exposed to a fire.

Protective equipment for fire-fighters Fire fighters should wear full protective equipment, including a NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION 6: Accidental Release Measures

Personal Precautions For personal protection, see section 8.

Environmental Precautions Keep out of drains, municipal sewers, open bodies of water and water course.

Spill Clean Up Methods Safely stop source of spill. Clean up spills immediately. Restrict non-essential personnel from the area. Wear protective clothing, goggles and respirator if ventilation is not adequate. Do NOT flush into sewer or storm drain. Dike spill area and neutralize with alkaline material (lime, sodium bicarbonate, soda ash); then soak up with an inert material (sand, vermiculite, earth). Place into a non-metal chemical waste container for disposal according to local, state or federal regulations at an approved chemical waste reprocessing facility. Neutralize residue with lime or soda ash and flush spill area.

SECTION 7: Handling and Storage

Handling Use proper personal protection when handling (refer to Section 8).

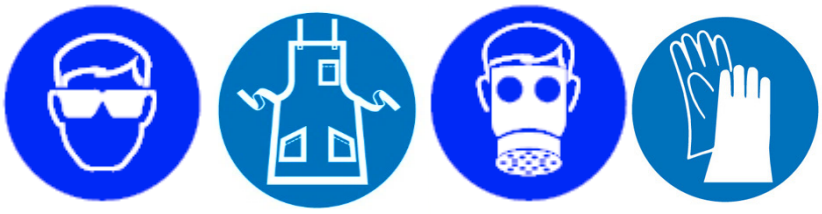
Usage Description Store closed containers in a cool, dry, well-ventilated area with acid-resistant floors. Keep out of direct sunlight and away from water, heat and incompatible materials. When diluting, always add product to water; do NOT add water to the product. This product is stable under normal conditions of handling and storage.

Storage Precautions The recommended shelf life is two (2) years. It is recommended that products be retested if stored for more than two (2) years. Under ideal storage conditions, the shelf life is almost indefinite.

Specific End Use(s) The identified uses are in section 1 of this Safety Data Sheet.

SECTION 8: Exposure Controls/Personal Protection

Protective Equipment



Component	STD	TWA (8 hrs.)		STEL (15mins)		Notes
2-butoxyethanol	OSHA	50ppm	240mg/m3			
hydrogen chloride	OSHA			5ppm	7mg/m3	

Ingredient Comments OSHA

Process Conditions Provide eyewash, quick drench.

Engineering Measures	General mechanical ventilation is recommended for enclosed areas.
Respiratory Equipment	Use a NIOSH approved acid gas/organic vapor respirator to reduce potential for inhalation exposure. When using respirator cartridges, they must be changed frequently to assure breakthrough exposure does not occur.
Hand Protection	Use neoprene, polyvinyl chloride (PVC) or rubber gloves to minimize skin contact.
Eye Protection	To avoid contact with eyes, use chemical splash goggles. Face shield is recommended. Eye wash station should be available in the work area.
Hygiene Measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Clear, reddish-brown liquid.
Color	Clear, reddish-brown liquid.
Odor	Pungent.
Odor Threshold - Lower	No Information available.
Odor Threshold - Upper	No Information available.
pH-Value, Conc. Solution	1.0
Melting point	No Information available.
Initial boiling point and boiling range	178.0 °F
Flash point	No Information available.
Evaporation rate	No Information available.
Flammability State	No Information available.
Flammability Limit - Lower (%)	No Information available.
Flammability Limit - Upper (%)	No Information available.
Vapor pressure	No Information available.
Vapor Density (air=1)	No Information available.
Relative density	1.16 @ 68.0 °F
Bulk Density	No Information available.
Solubility	Completely soluble in water.
Decomposition temperature	No Information available.
Partition coefficient; n-octanol/water	No Information available.
Auto Ignition Temperature (°C)	No Information available.
Viscosity	No Information available.
Explosive Properties	No information available.
Oxidizing properties	No Information available.
Molecular Weight	No Information available.
Volatile Organic Compound	No Information available.

SECTION 10: Stability and Reactivity

Reactivity	Most metals, hydroxides, amines, alkalis/caustics, cyanides, sulfides, strong oxidizers, carbonates, hypochlorites and formaldehyde. May react violently with incompatible substance, releasing toxic and/or flammable gases.
Stability	This product is stable at ambient temperatures and atmospheric pressures.
Hazardous Polymerization	Hazardous polymerization is not expected to occur under normal temperatures and pressures.
Hazardous Decomposition Products	Heat can cause evolution of gaseous hydrogen chloride.
Conditions to Avoid	Avoid exposing to contact with Most metals, hydroxides, amines, alkalis/caustics, cyanides, sulfides, strong oxidizers, carbonates, hypochlorites and formaldehyde. May react violently with incompatible substance, releasing toxic and/or flammable gases.
Materials to Avoid	Avoid exposing to contact with Most metals, hydroxides, amines, alkalis/caustics, cyanides, sulfides, strong oxidizers, carbonates, hypochlorites and formaldehyde. May react violently with incompatible substance, releasing toxic and/or flammable gases.

SECTION 11: Toxicological Information

Toxicological Information	No toxicological information for the overall finished product
Acute Toxicity (Oral LD50)	>180.00mg/kg Rat
Acute Toxicity (Dermal LD50)	No Information available.
Acute Toxicity (Inhalation LC50)	>635.00mg/l (vapors) Rabbit
Skin Corrosion/Irritation	No Information available.
Respiratory Sensitization	No Information available.
Skin Sensitization	No Information available.
Reproductive Toxicity:	No Information available.
Germ Cell Mutagenicity:	
Genotoxicity - In Vitro	
Genotoxicity - In Vivo	
Carcinogenicity:	
Carcinogenicity	No Information available.
NTP - Carcinogenicity	The product and its components are not listed.
OSHA - Carcinogenicity	The product and its components are not listed.
IARC Carcinogenicity	**2-butoxyethanol**: 3 IARC Group 3 Not classifiable as to its carcinogenicity to humans. **hydrogen chloride**: 3 IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Specific Target Organ Toxicity - Single Exposure:

STOT - Single Exposure	No Information available.

Specific Target Organ Toxicity - Repeated Exposure:

STOT - Repeated Exposure	No Information available.

SECTION 12: Ecological Information

Ecotoxicity	No Information available.
Acute Toxicity - Fish	No Information available.
Acute Toxicity - Aquatic Invertebrates	No Information available.
Acute Toxicity - Aquatic Plants	No Information available.
Degradability	No information available.
Bioaccumulative Potential	
Mobility	No information available
Results of PBT and vPvB Assessment	The product does not contain any PBT or vPvB Substances.
Other Adverse Effects	None known.

SECTION 13: Disposal Considerations

Waste Management — When handling waste, consideration should be made to the safety precautions applying to handling of the product.

Disposal Methods — Do NOT dump into any sewers, on the ground or into any body of water. Rinse containers before disposal. Since emptied containers contain product residue, follow label warnings even after container is emptied. Do NOT reuse empty containers. Dispose in accordance with all applicable federal, state and local laws and regulations.

SECTION 14: Transport Information

UN No. (DOT/TDG)	1789 - HYDROCHLORIC ACID
UN No. (IMDG)	1789 - HYDROCHLORIC ACID
UN No. (ICAO)	1789 - Hydrochloric acid
DOT Proper Shipping Name	1789 - HYDROCHLORIC ACID
TDG Proper Shipping Name	1789 - HYDROCHLORIC ACID
DOT Hazard Class	8
DOT Hazard Label	Class 8 - Corrosive
TDG Class	8
TDG Label(s)	8
IMDG Class	8
ICAO Class	8
Transport Labels	
DOT Pack Group	II
IMDG Pack Group	II
Air Pack Group	II
EMS	F-A, S-B
Environmentally Hazardous Substance/Marine Pollutant	No

SECTION 15: Regulatory Information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
The Following ingredients are listed — prop-2-yn-1-ol

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The Following ingredients are listed — prop-2-yn-1-ol

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
The Following ingredients are listed — prop-2-yn-1-ol

SARA 313 Emission Reporting
The Following ingredients are listed — prop-2-yn-1-ol

CAA Accidental Release Prevention

The Following ingredients are listed	acetophenone
	prop-2-yn-1-ol
	hydrogen chloride

OSHA Highly Hazardous Chemicals

The Following ingredients are listed	hydrogen chloride

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

The Following ingredients are listed	None Listed.

California Air Toxics "Hot Spots" (A-I)

The Following ingredients are listed	None Listed.

California Air Toxics "Hot Spots" (A-Ii)

The Following ingredients are listed	None Listed.

Massachusetts "Right To Know" List

The Following ingredients are listed	2-butoxyethanol
	acetophenone
	prop-2-yn-1-ol
	hydrogen chloride

Rhode Island "Right To Know" List

The Following ingredients are listed	prop-2-yn-1-ol

Minnesota "Right To Know" List

The Following ingredients are listed	2-butoxyethanol
	acetophenone
	prop-2-yn-1-ol
	hydrogen chloride

New Jersey "Right To Know" List

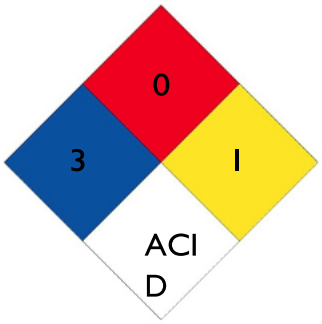
The Following ingredients are listed	2-butoxyethanol
	acetophenone
	prop-2-yn-1-ol
	hydrogen chloride

Pennsylvania "Right To Know" List

The Following ingredients are listed	2-butoxyethanol
	acetophenone
	prop-2-yn-1-ol
	hydrogen chloride

SECTION 16: Other Information

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	H

Revision Comments
Revision Date 5/22/2015
Revision 1

Disclaimer
This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.