

Safety Data Sheet

Issue date: 2/18/2015

Section 1: Product and Company Information

Product Identifier: **ACS Descaler**

Product Code/SKU: 700709

Recommended Use: Lime scale remover

Restrictions on Use: Use only for purpose found on label.

Product Dilution Information: Use as directed per label instructions

Manufacturer: **American Chemical Systems II, LLC**

3505 W. 29th Street South

Wichita, KS USA 67217

(800)889-3489

americanchemicalsystems.com

Emergency Telephone: Chemtrec 1-800-424-9300 USA and Canada

Chemtrec 1-703-527-3887 Outside USA and Canada

Section 2: Hazard Identification

GHS Classification: Corrosive to metals - category 1

Skin irritation/corrosion

Eye irritation/eye damage

May cause respiratory irritation

GHS Labeling Element

Signal Word:

Danger

Symbol:



Hazard Statement: Corrosive to metals

Causes skin and eye damage

May cause respiratory irritation

Precautionary Statements:

Prevention:

Wear protective clothing, gloves, and eye and face protection.

Response:

If swallowed: Rinse mouth, do not induce vomiting.

If on skin: Wash with water, remove contaminated clothing.

Inhalation: Remove person to fresh air - administer artificial respiration if not breathing.

If in eye: Flush continuously with water - remove contacts and continue flushing with water.

Treatment: Seek medical assistance if symptoms persist.

Storage: Keep product stored in original container, in an upright position, with container tightly closed.

Disposal: Dispose of contents/container according to local/regional regulations.

Other Hazards: None known

Section 3: Composition/Information on Ingredients

Substance/Mixture: Mixture

Chemical name	Product Identifier	%
Phosphoric acid	CAS 7664-38-2	15-25%

Hydrochloric acid

CAS 7647-01-0

0-10%

There are no additional ingredients present which, within the current knowledge of the manufacturer and in the concentrations applicable, are classified as hazardous to health or to the environment and hence require reporting in this section. Concentration percentages are given as a range as a claim for a trade secret is being made.

Section 4: First Aid Measures

First Aid Measures:

- General: Never give anything by mouth to an unconscious person. If you feel unwell, then seek medical assistance.
- If swallowed: Rinse mouth, do not induce vomiting.
- If on skin: Wash with water, remove contaminated clothing.
- Inhalation: Remove person to fresh air - administer artificial respiration if not breathing.
- If in eye: Flush continuously with water - remove contacts and continue flushing with water.
- Treatment: Seek medical assistance if symptoms persist.

Important Symptoms and Effects, both Acute and Delayed

- Symptoms/Injuries: Causes severe skin burns and eye damage. Effects of exposure may be delayed.
- If swallowed: Ingestion is likely to be harmful and have adverse health effects.
- If on skin: Causes skin burns.
- Inhalation: Symptoms may cause irritation to the respiratory tract.
- If in eye: Causes eye damage.

Recommendation: Seek medical assistance if symptoms persist or concerns are present.

First Aid Providers All first aid providers should receive proper training before performing any first aid act that would involve personal risk. Wash contaminated clothing with water thoroughly before removal or wear gloves.

Section 5: Firefighting Measures

Suitable Fire Extinguishing

- Media: No special media necessary. Use extinguishing media appropriate for surrounding fire.
- Special Hazards: Product is non flammable and is not explosive. Product is corrosive to metals as sold.
- Advice for Firefighters: Exercise caution when fighting any chemical fire. Use a water spray to cool containers. Do not enter fire area without proper protective equipment, including respiratory protection.

Section 6: Accidental Release Measures

- Personal Precautions: Initiate company's spill procedures. Do not walk through or touch spilled product. Do not get on skin, in eyes, or on clothing. Put on appropriate personal protection equipment.
- Environmental Precautions: Avoid runoff into public waterways, sewers, or onto soil.
- Methods for Clean Up: Follow company's spill procedures. Put on appropriate protective clothing. Neutralize/absorb spilled product with inert material. Dispose of inert material by placing in suitable container. Dispose of waste safely. Rinse with water for a final clean up.

Section 7: Handling and Storage

Precautions for Safe

- Handling: Do not get on skin, in eyes, or on clothing. Do not breathe vapor or mist. Do not handle until all safety procedures have been read and understood. Wash hands and other exposed areas with soap and water after handling.
- Conditions for Safe Storage: Keep product in original container, in an upright position, with container tightly closed. Keep out of reach of children.

Section 8: Exposure Controls/Personal Protection

Control parameters:

Ingredient Name	Exposure Limits
Phosphoric acid	ACGIH TWA (mg/m ³) 1 mg/m ³

	ACGIH STEL (mg/m ³)	3 mg/m ³
	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³
	NIOSH REL (STEL) (mg/m ³)	3 mg/m ³
	US IDLH (mg/m ³)	1000 mg/m ³
	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
Hydrochloric acid	ACGIH Ceiling (ppm)	2 ppm
	NIOSH REL (Ceiling) (mg/m ³)	7mg/m ³
	NIOSH REL (Ceiling) (ppm)	5 ppm
	US IDLH (ppm)	50 ppm
	OSHA PEL (Ceiling) (mg/m ³)	7 mg/m ³
	OSHA PEL (Ceiling) (ppm)	5 ppm

Engineering Controls: Use adequate ventilation. Keep vapor/fumes below statutory limits. Provide availability to water to flush skin or eyes in case of exposure.

Personal Protection:

Hand protection: Wear chemical resistant gloves

Eye protection: Use chemical splash goggles. For severe exposure, wear face shield.

Skin protection: Wear suitable protective clothing.

Respiratory protection: Not necessary under normal operating and intended use of this product.

General: Wash hands, face, and arms after handling chemical products and before eating, drinking, or using restroom. Wash contaminated clothing before wearing again.

Section 9: Physical and Chemical Properties

Physical state:	Liquid
Color:	Green
Odor:	Chemical
pH:	<6
Evaporation rate:	No data available
Melting point:	No data available
Freezing point:	No data available
Boiling point:	No data available
Flash point:	No data available
Explosion limits:	No data available
Flammability (solid/gas):	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	>1 (water=1)
Solubility:	No data available
Decomposition temperature:	No data available

Section 10: Stability and Reactivity

Reactivity:	Corrosive to metals.
Chemical stability:	Stable.
Hazardous Reactions:	Hazardous polymerization will not occur.
Conditions to Avoid:	Direct sunlight. Extreme temperatures. Contact with metal.
Incompatible Materials:	Strong acids. Strong bases. Strong oxidizers. Metals.
Hazardous Decomposition Products:	Under normal conditions of storage and use, hazardous decomposition products should not occur.

Section 11: Toxicological Information

Routes of Exposure: Ingestion. Skin contact. Inhalation. Eye contact.

Symptoms:	Ingestion:	Adverse effects: stomach pains
	Skin Contact:	Adverse effects: irritation, redness, blisters
	Inhalation:	Adverse effects: cough, respiratory irritation
	Eye Contact:	Adverse effects: redness, watering, irritation
Acute Toxicity:	Ingestion:	May cause burns to mouth, throat, stomach

Skin Contact: May cause skin burns
 Inhalation: May cause respiratory irritation
 Eye Contact: May cause serious eye damage.

Toxicity Data:	Phosphoric acid (CAS 7664-38-2)	LD50 oral rat	1350 mg/kg
		LD50 dermal rabbit	2730 m/kg
		LC50 inhalation rat	>850mg/m ³
	Hydrochloric acid (CAS7647-01-0)	LD50 dermal rat	>5010 mg/kg
		LC50 inhalation rat	4 h 781 ppm

Carcinogenicity: No known effects or critical hazards
 Reproductivity: No known effects or critical hazards

Section 12: Ecological Information

Toxicity:		Exposure	Species
Phosphoric acid (CAS 7664-38-2)	LC50 Fish 1	3.5mg/l	96 h Gambusia affinis
Phosphoric acid (CAS 7664-38-2)	EC50 Daphnia	4.6 mg/l	12 h Daphnia magna
Hydrochloric acid (CAS7647-01-0)	LC50 Fish 1	282 mg/l	96 h Gambusia affinis [static]

Persistence and degradability: Not established
 Bioaccumulative potential: Not established
 Mobility in Soil: Not established
 Other adverse effects: None noted

Section 13: Disposal Considerations

Disposal methods: Dispose of waste in accordance with local, regional, and national regulations

Section 14: Transport Information

In accordance with: ICAO/IATA/DOT/TDG

DOT Classification: UN 1760
 DOT Shipping name: Corrosive Liquid (Phosphoric acid, Hydrochloric acid)
 Class: 8
 Packing Group: III
 Bulk Transport: See shipping documents for specific transportation information
 Marine Pollutant: No

Section 15: Regulatory Information

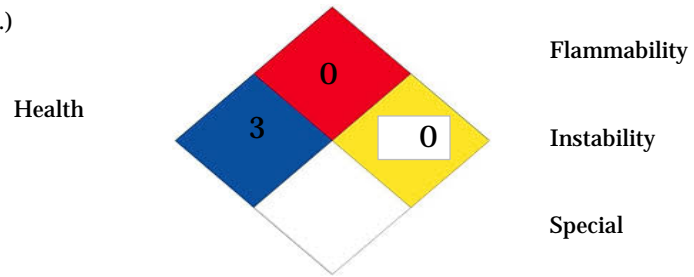
US Federal Regulations: All components are listed or exempted
 TSCA 8(b) Inventory: No chemicals subject to reporting
 SARA 304: Acute health hazard
 SARA 311/312: Hydrochloric acid has specific toxic chemical listing
 SARA 302: Hydrochloric acid has specific toxic chemical listing
 SARA 313:

Section 16: Other Information

Hazardous Material Information System:

Health	3
Flammability	0
Physical Hazards	0

National Fire Protection Association (U.S.A.)



The information provided in this SDS Safety Data Sheet is correct to the best of knowledge, information, and belief at this date of publication. The information given is designed only as a guide for safe usage, handling, transporting, storage, disposal and is not to be considered a warranty or quality specification. No warranty, either express or implied, is made to the completeness or continuing accuracy of this information.