

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: ADACU
Product Name: Acid A-CU
Company Name: Shepard Bros., Inc.
503 S. Cypress St.
La Habra, CA 90631
Phone Number: +1 (562)697-1366
Web site address: www.shepardbros.com
Emergency Contact: CHEMTREC +1 (800)424-9300

2. HAZARDS IDENTIFICATION

Corrosive To Metals, Category 1
Skin Corrosion/Irritation, Category 1B
Serious Eye Damage/Eye Irritation, Category 1



GHS Signal Word: **Danger**
GHS Hazard Phrases: H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
GHS Precaution Phrases: P234 - Keep only in original container.
P260 - Do not breathe mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
GHS Response Phrases: P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P363 - Wash contaminated clothing before reuse.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - 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.
P321 - Specific treatment see Section 4 reference to supplemental first aid instruction - if immediate measures are required.
P390 - Absorb spillage to prevent material damage.
GHS Storage and Disposal Phrases: P405 - Store locked up. P501 - Dispose of contents and containers in accordance with local, regional, national, and international regulations.
Inhalation: May be harmful if inhaled. May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.
Skin Contact: May cause skin irritation. May cause redness and burns to the skin.
Eye Contact: Corrosive to the eyes. May cause eye irritation and possible burns. May cause eye damage.
Ingestion: Harmful if swallowed. May cause irritation and/or burns of the gastrointestinal tract, followed by nausea, vomiting, abdominal pain and tissue destruction.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
7664-38-2	Phosphoric acid	<20.0 %
75-75-2	Methanesulfonic acid	<8.00 %
NA	(Trade Secret)	<=1.00 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

In Case of Inhalation:	Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Get immediate medical attention if symptoms occur.
In Case of Skin Contact:	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Gently wash with plenty of soap and water. Wash contaminated clothing separately before reuse. Get immediate medical advice/attention.
In Case of Eye Contact:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get immediate medical advice/attention.
In Case of Ingestion:	Do NOT induce vomiting. Rinse mouth with water. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Note to Physician:	Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES

Flash Pt:	NA	Method Used:	Not Applicable
Explosive Limits:	LEL: No data.	UEL:	No data.
Autoignition Pt:	NA		
Suitable Extinguishing Media:	Use dry chemical, carbon dioxide, or alcohol-resistant foam.		
Unsuitable Extinguishing Media:	Do not use full water jet.		
Fire Fighting Instructions:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear. Do NOT get water inside containers. Cool containers with flooding quantities of water until well after fire is out.		
Flammable Properties and Hazards:	Reacts with "active" metals to produce hydrogen gas. May spatter and release heat if mixed with bases (alkalis). Mixing with chlorinated products may release deadly chlorine gas.		
Hazardous Combustion Products:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: sulfur, phosphorus, phosphine.		



SHEPARD BROS.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: Use proper personal protective equipment as indicated in Section 8.

Environmental Precautions: Do not let product enter drains, sewers, watersheds or water systems.

Steps To Be Taken In Case Material Is Released Or Spilled: Spills/Leaks: Provide ventilation. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Contain spill using an inert diking material. Transfer material into an approved container for possible recovery and reuse or for disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Use as directed. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not mix with other chemicals except as directed on label.

Precautions To Be Taken in Storing: Store in a cool, dry, well-ventilated area away from incompatible substances. Store in a tightly closed container. Keep only in original container. Keep container closed when not in use. Protect containers against damage.

Other Precautions: Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7664-38-2	Phosphoric acid	PEL: 1 mg/m3	TLV: 1 mg/m3 STEL: 3 mg/m3	No data.
75-75-2	Methanesulfonic acid	No data.	No data.	No data.
6419-19-8	Aminotri (methylenephosphonic acid)	No data.	No data.	No data.
NA	(Trade Secret)	No data.	No data.	No data.

Respiratory Equipment (Specify Type): Avoid breathing vapors and mists. In case of insufficient ventilation, wear suitable respiratory equipment.

Eye Protection: Splash proof safety goggles.

Protective Gloves: Wear appropriate gloves to prevent skin exposure. nitrile gloves, Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Use adequate ventilation to keep airborne concentrations low. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [X] Liquid [] Solid	
Appearance and Odor:	Appearance: Clear. colorless. Liquid.	
pH:	< 2.0	
Melting Point:	NA	
Boiling Point:	NA	
Flash Pt:	NA Method Used: Not Applicable	
Evaporation Rate:	NA	
Flammability (solid, gas):	No data available.	
Explosive Limits:	LEL: No data.	UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	NA	
Vapor Density (vs. Air = 1):	NA	
Specific Gravity (Water = 1):	NA	
Density:	9.79	
Bulk density:	NA	
Solubility in Water:	NA	
Saturated Vapor Concentration:	NA	
Octanol/Water Partition Coefficient:	No data.	
Percent Volatile:	NA	
VOC / Volume:	NA	
Autoignition Pt:	NA	
Decomposition Temperature:	NA	
Viscosity:	NA	
Particle Size:	NA	
Heat Value:	NA	
Corrosion Rate:	NA	

10. STABILITY AND REACTIVITY

Reactivity:	May spatter and release heat if mixed with bases (alkalis). Mixing with chlorinated products may release deadly chlorine gas.
Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	High temperatures, Ignition sources, Incompatible materials.
Incompatibility - Materials To Avoid:	Strong bases, Strong reducing agents, Powdered metals, amines, steel (corrodes it), ethylvinyl ether, Reacts with "active" metals to produce hydrogen gas. May react with other chemicals. Do not mix with other chemicals except as directed on label.
Hazardous Decomposition or Byproducts:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: sulfur, phosphorus, phosphine.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information:	Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: No information available. Mutagenicity: No information available. Neurotoxicity: No information available. Other Studies: CAS# 7664-38-2: Acute toxicity, LD50, Oral, Rat, 1530 mg/kg Acute toxicity, LD50, Skin, Rabbit, 2740 mg/kg Acute toxicity, LC50, Inhalation, Rat, 850.0 mg/m ³ , 1 H. Other Studies: CAS# 75-75-2: Acute toxicity, LD50, Oral, Rat, 200 mg/kg Acute toxicity, LD50, Dermal, Guinea Pig, 2 g/kg. Other Studies: CAS# 6419-19-8: Acute toxicity, LD50, Oral, Rat, 2100 mg/kg.
Irritation or Corrosion:	Other Studies: CAS# 7664-38-2: Standard Draize Test, Eyes, Species:Rabbit, 119.0 mg. Other Studies: CAS# 6419-19-8: Standard Draize Test, Skin, Species: Rabbit, 500.0 mg, 24H. Standard Draize Test, Eyes, Species: Rabbit, 100.0 mg.
Symptoms related to Toxicological Characteristics:	May cause skin irritation. May cause redness and burns to the skin. Corrosive to the eyes. May cause eye irritation and possible burns. May cause eye damage. May cause irritation and/or burns of the gastrointestinal tract, followed by nausea, vomiting, abdominal pain and tissue destruction. May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.
Sensitization:	No data available.
Chronic Toxicological Effects:	No data available.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:	Environmental: No information available. Physical: No information available. Other Studies: CAS# 7664-38-2: Not reported. Rainbow Trout (<i>Oncorhynchus mykiss</i>), fingerling, 5.190%, 27 W.
Results of PBT and vPvB assessment:	No data available.
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Phosphoric acid solution.
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN1805 **Packing Group:** III



15. REGULATORY INFORMATION

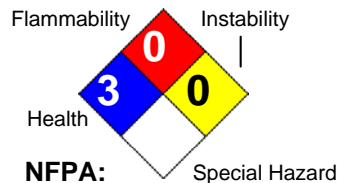
EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7664-38-2	Phosphoric acid	No	Yes 5000 LB	No
75-75-2	Methanesulfonic acid	No	No	No
6419-19-8	Aminotri (methylenephosphonic acid)	No	No	No
NA	(Trade Secret)	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7664-38-2	Phosphoric acid	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8
75-75-2	Methanesulfonic acid	TSCA: Yes - Inventory, 12(b); CA PROP.65: No; CA TAC, Title 8: No
6419-19-8	Aminotri (methylenephosphonic acid)	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No
NA	(Trade Secret)	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No

16. OTHER INFORMATION

Revision Date: 01/09/2017
Preparer Name: Crystal Maira
Hazard Rating System:



Additional Information: No data available.
Company Policy or Disclaimer: Information presented herein is believed to be accurate and reliable to the best of our knowledge. However, we make no warranty or merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. The information relates only to the specific material designated and may not



SAFETY DATA SHEET

Acid A-CU

Page: 7 of 7
Printed: 01/11/2017
Revision: 01/09/2017

be valid for such material used in combination with any other material or in any process. Users should make their own investigations to determine the suitability of the information for their particular purposes.