

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: AZNF20
Product Name: Acidize NF-20
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

Product Category: Sanitizer

2. HAZARDS IDENTIFICATION

Skin Corrosion/Irritation, Category 1A

Skin Corrosion/Irritation, Category 1B



GHS Signal Word: Danger

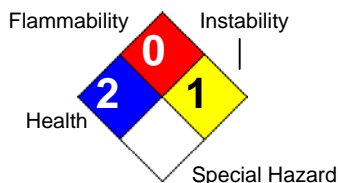
GHS Hazard Phrases: H314 - Causes severe skin burns and eye damage. EUH071 - Corrosive to the respiratory tract.

GHS Precaution Phrases: P271 - Use only outdoors or in a well-ventilated area.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P362+364 - Take off contaminated clothing and wash it before reuse.

GHS Response Phrases: P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P315 - Get immediate medical advice/attention.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P315 - Get immediate medical advice/attention.
P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs, get medical advice/attention.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P315 - Get immediate medical advice/attention.
P321 - Specific treatment see Section 4 reference to supplemental first aid instruction - if immediate measures are required.

GHS Storage and Disposal Phrases: P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard Rating System:



NFPA Hazard Ratings



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Potential Health Effects (Acute and Chronic):

The severity of injury depends on the concentration of the solution and the duration of exposure.
Chronic: Not available.

Inhalation:

Can cause severe respiratory irritation. Vapors are extremely irritating and corrosive. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. High concentrations may cause acute pulmonary edema.

Skin Contact:

Can cause severe injury (reddening and swelling). Causes skin burns. Severely irritating, may cause permanent skin damage.

Eye Contact:

Corrosive. Will cause eye burns and permanent tissue damage.

Ingestion:

Can burn mouth, throat and stomach.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
7664-38-2	Phosphoric acid	8.50 %
7664-93-9	Sulfuric acid	9.5 %
79-09-4	Propionic acid	10.0 %
334-48-5	Decanoic acid	3.00 %
112-05-0	Nonanoic acid	3.00 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

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 medical attention immediately.

In Case of Inhalation:

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 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. 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.

Signs and Symptoms Of Exposure:

Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

Note to Physician:

Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.



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5. FIRE FIGHTING MEASURES

Flash Pt:	NA	
Explosive Limits:	LEL: No data.	UEL: No data.
Autoignition Pt:	No data.	
Suitable Extinguishing Media:	Foam, CO2, water fog, sand/earth.	
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. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Containers may explode in the heat of a fire. Runoff from fire control or dilution water may cause pollution.	
Flammable Properties and Hazards:	Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.	

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Use proper personal protective equipment as indicated in Section 8.
Steps To Be Taken In Case Material Is Released Or Spilled:	Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Provide ventilation. Remove all sources of ignition. Cover with dry earth, dry sand, or other non-combustible material followed with plastic sheet to minimize spreading and contact with water. Neutralize acid with soda ash or sodium bicarbonate. Carefully scoop up and place into appropriate disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Do not let this chemical enter the environment.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat, sparks and flame.
Precautions To Be Taken in Storing:	Store in a cool, dry, well-ventilated area away from incompatible substances. Do not store near alkaline substances. Do not store near combustible materials. Keep away from sources of ignition. Store away from sparks, flames. Keep container closed when not in use. Protect containers against damage.
Other Precautions:	Do not mix with chlorinated product. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. 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.
7664-93-9	Sulfuric acid	PEL: 1 mg/m3	TLV: (1 mg/m3) STEL: (3 mg/m3)	No data.
79-09-4	Propionic acid	No data.	TLV: 10 ppm	No data.
334-48-5	Decanoic acid	No data.	No data.	No data.
112-05-0	Nonanoic acid	No data.	No data.	No data.

Respiratory Equipment (Specify Type):	Avoid breathing vapors and mists. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Eye Protection:	Wear chemical splash goggles and a full-face shield where there is potential for eye contact.
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure. Wear neoprene gloves, apron, and/or clothing.
Other Protective Clothing:	Wear appropriate protective clothing to prevent skin exposure. Chemical resistant apron. Rubber or neoprene boots.
Engineering Controls (Ventilation etc.):	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. Use a corrosion-resistant ventilation system.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [X] Liquid [] Solid	
Appearance and Odor:	Appearance: Clear. colorless. Liquid. Odor: pungent odor.	
Melting Point:	NA	
Boiling Point:	212 F (100 C)	
Autoignition Pt:	No data.	
Flash Pt:	NA	
Explosive Limits:	LEL: No data.	UEL: No data.
Specific Gravity (Water = 1):	1.155	
Density:	9.62 LB/GA	
Vapor Pressure (vs. Air or mm Hg):	NA	
Vapor Density (vs. Air = 1):	NA	
Evaporation Rate:	1 (H2O=1)	
Solubility in Water:	Complete	
Saturated Vapor Concentration:	NA	
Viscosity:	NA	
pH:	1.9 - 1% soln.	
Percent Volatile:	50.7 % by volume.	

10. STABILITY AND REACTIVITY

Reactivity:	Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.
Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Incompatible materials, Excess heat, ignition sources, Always add the acid to water, never the reverse.
Incompatibility - Materials To Avoid:	Oxidizing agents, Reducing agents, Amines, Bases, Halogens, chlorates, perchlorates, permanganates, nitrates, Chlorinated products. Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.
Hazardous Decomposition Or Byproducts:	Carbon monoxide, oxides of phosphorus, oxides of sulfur, hydrogen gas. Phosphine, Will emit chlorine gas if mixed with chlorinated products. Contact of this product with many "active" metals such as aluminum, copper and zinc, can cause formation of flammable hydrogen gas.
Possibility of Hazardous	Will occur [] Will not occur [X]



Reactions:

Conditions To Avoid - No data available.

Hazardous Reactions:

11. TOXICOLOGICAL INFORMATION

Toxicological Information:

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No data available.
Mutagenicity: No information available.
Neurotoxicity: No data 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/m3, 1 H.

Other Studies: CAS# 7664-93-9:
Acute toxicity, LD50, Oral, Rat, 2140 mg/kg
Acute toxicity, LC50, Inhalation, Rat, 510.0 mg/m3, 2 H.

Other Studies: CAS# 79-09-4:
Acute toxicity, LD50, Oral, Rat, 2600 mg/kg
Acute toxicity, LD50, Skin, Rabbit, 500.0 ul/kg

Other Studies: CAS# 334-48-5:
Acute toxicity, LD50, Oral, Rat, 10.00 gm/kg

Irritation or Corrosion:

Other Studies: CAS# 7664-38-2:
Standard Draize Test, Eyes, Species:Rabbit, 119.0 mg

Other Studies: CAS# 7664-93-9:
Standard Draize Test, Eyes, Species:Rabbit, 250.0 ug

Other Studies: CAS# 79-09-4:
Standard Draize Test, Eyes, Species:Rabbit, 990.0 ug

Other Studies: CAS# 334-48-5:
Standard Draize Test, Skin, Species:Rabbit, 500.0 mg, 24 H.

Other Studies: CAS# 112-05-0:
Standard Draize Test, Skin, Species:Rabbit, 500.0 mg, 24 H.
Standard Draize Test, Eyes, Species:Rabbit, 91.00 mg.

Carcinogenicity/Other Information:

CAS# 7664-38-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 7664-93-9: ACGIH: A2 - Suspected Human Carcinogen. California: carcinogen, initial date 3/14/03 (listed as Strong inorganic acid mists containing sulfur. NTP: Known carcinogen (listed as Strong inorganic acid mists containing s).
CAS# 79-09-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 334-48-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Carcinogenicity:

NTP? No IARC Monographs? No OSHA Regulated? No



12. ECOLOGICAL INFORMATION

General Ecological Information:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use. This product is toxic to fish. Keep out of lakes, ponds or streams. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the Environmental Protection Agency.

Results of PBT and vPvB assessment:

Other Studies: CAS# 7664-38-2:

Not reported. Rainbow Trout (*Oncorhynchus mykiss*), fingerling, 5.190%, 27 W, Biochemistry

Other Studies: CAS# 7664-93-9:

Effective concentration to 0% of test organisms, Water Flea (*Daphnia magna*), young org, 88.0ppm, 16H, Intoxication

LC50, Common Shrimp, Sand Shrimp (*Crangon crangon*), adult(s), 70000 - 80000 ug/L, 48H, Mortality

LC50, Western Mosquitofish (*Gambusia affinis*), adult(s), 42000 ug/L, 24H, Mortality

Effective concentration to 0% of test organisms, Dinoflagellate (*Ceratium sp.*), 90.0 ml, 14 D, Population

Effective concentration to 0% of test organisms, Plant Kingdom (*Plantae*), 90.0 ml, 14 D, Population

Other Studies: CAS# 79-09-4:

LC50, Bluegill, (*Lepomis macrochirus*), 188000 ug/L, 24H, Mortality

LC50, Rainbow Trout, (*Oncorhynchus mykiss*), 67.10 ppm, 96H, Mortality

LC50, Water Flea (*Daphnia magna*), 50000 ug/L, 48H, Mortality

Other Studies: CAS# 334-48-5:

LC50, African Clawed Frog, (*Xenopus laevis*), embryo(s), 24000 ug/L, 96H, Mortality

Other Studies: CAS# 112-05-0:

LC50, Bluegill, (*Lepomis macrochirus*), 105.0 ppm, 96H, Mortality

LC50, Rainbow Trout, (*Oncorhynchus mykiss*), 91.00 ppm, 96H, Mortality

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.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. PROPIONIC ACID, SULFURIC ACID
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN3264 **Packing Group:** II



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
7664-93-9	Sulfuric acid	Yes 1000 LB	Yes 1000 LB	Yes
79-09-4	Propionic acid	No	Yes 5000 LB	No
334-48-5	Decanoic acid	No	No	No
112-05-0	Nonanoic acid	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7664-38-2	Phosphoric acid	TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8
7664-93-9	Sulfuric acid	TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8
79-09-4	Propionic acid	TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8
334-48-5	Decanoic acid	TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: No
112-05-0	Nonanoic acid	TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: No

Regulatory Information:

EPA Registration Number: 4959-41-50600
 This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
DANGER. CORROSIVE. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

16. OTHER INFORMATION

Revision Date: 07/30/2013
Additional Information About This Product: 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,



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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 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.