SAFETY DATA SHEET
HD High Foaming Acid Cleaner

Printed: 05/11/2015
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Supersedes Revision: 12/22/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: HIGHSI-013-BULK

Product Name: HD High Foaming Acid Cleaner

Company Name: High Sierra
P. O. Box 848
Chippewa Falls, WI 54729

Phone Number: +1 (715)723-4915

Emergency Contact: CHEMTREC

Phone Number: +1 (800)424-9300

2. HAZARDS IDENTIFICATION

Skin Corrosion/Irritation, Category 1A
Oxidizing Liquids, Category 3
Serious Eye Damage/Eye Irritation, Category 1

GHS Signal Word: **Danger**

GHS Hazard Phrases:
H272 - May intensify fire; oxidizer.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.

GHS Precaution Phrases:
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P220 - Keep away from combustible materials.
P221 - Take any precaution to avoid mixing with combustibles/...
P260 - Do not breathe fume/gas/mist/vapours/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.
P315 - Get immediate medical advice/attention.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes.
P315 - Get immediate medical advice/attention. 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.
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.

GHS Storage and Disposal Phrases:
P405 - Store locked up.
P501 - Dispose of contents/container in accordance to local, state and federal regulations.

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):

Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes chemical burns to the respiratory tract.

Skin Contact: May be harmful if absorbed through the skin. Causes skin burns.

Eye Contact: Causes eye burns. Causes severe eye irritation. May cause painful sensitization to light.

Ingestion: Toxic if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
7664-38-2	Phosphoric acid	<15.0 %
7697-37-2	Nitric acid	<10.0 %
NA	Surfactant	< 5.0 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. Get medical aid immediately.

In Case of Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash off with soap and plenty of water. Wash clothing before reuse. Get medical aid immediately.

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. Continue rinsing. Get immediate medical advice/attention.

In Case of Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.
If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention immediately.

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

5. FIRE FIGHTING MEASURES

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

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. Use water spray to keep fire-exposed containers cool.

Flammable Properties and Hazards: No data available.

No data available.

6. ACCIDENTAL RELEASE MEASURES

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

Environmental Precautions: Observe all federal, state, and local environmental regulations.

Steps To Be Taken In Case Material Is Released Or Spilled: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid breathing vapors, mist or gas.
Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Use with adequate ventilation. Keep container tightly closed. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Avoid ingestion and inhalation. Wash thoroughly after handling.

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 container closed when not in use.

Other Precautions: Handle in accordance with good industrial hygiene and safety practice.

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.
7697-37-2	Nitric acid	PEL: 2 ppm	TLV: 2 ppm STEL: 4 ppm	No data.
NA	Surfactant	No data.	No data.	No data.

Respiratory Equipment (Specify Type): Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye Protection: Wear chemical splash goggles.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.

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

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [X] Liquid [ ] Solid

Appearance and Odor: Red.
Liquid.
Transparent.

Melting Point: No data.

Boiling Point: No data.

Flash Pt: No data.

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): 1.107 - 1.127

Solubility in Water: No data.

Percent Volatile: No data.

Autoignition Pt: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [X]

Conditions To Avoid - Instability: Extremes of temperature and direct sunlight. Incompatible materials.

Incompatibility - Materials To Avoid: Strong oxidizing agents, Strong reducing agents, Strong bases, chlorine.

Hazardous Decomposition or Byproducts: Carbon oxides, oxides of phosphorus, nitrogen oxides (NOx), hydrogen gas, Phosphine, irritating and toxic fumes and gases.

Possibility of Hazardous Reactions: Will occur [ ] Will not occur [X]

Conditions To Avoid - Hazardous Reactions: No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information:

Reproductive Effects: No data available.
Mutagenicity: No data available.
Epidemiology: No data available.
Teratogenicity: No data available.
Neurotoxicity: No data available.

CAS# 7664-38-2: Phosphoric acid: Acute toxicity, LD50, Oral, Rat, 1530. MG/KG. Result: Kidney, Ureter, Bladder: Changes in liver weight. Blood:Other hemolysis with or withot anemia. Blood:Changes in spleen.
Standard Draize Test, Skin, Species: Rabbit, 595.0 MG, 24 H. Result: Behavioral: Somnolence (general depressed activity). Behavioral: Muscle contraction or spasticity. Lungs, Thorax, or Respiration:Dyspnea.
Standard Draize Test, Eyes, Species: Rabbit, 119.0 MG. Result: Blood:Change in clotting factors.
CAS# NA: Surfactant: Acute toxicity, LD50, Oral, Rat, 960.0 - 3980. MG/KG. Result: Blood:Tumors. Immunological Including Allergic: Autoimmune (multiple organ involvement).
Acute toxicity, LD50, Dermal, Rabbit, 2000. - 2991. MG/KG. Result: Behavioral: Somnolence (general depressed activity). Vascular: BP lowering not charactertized in autonomic section. Skin and Appendages: Skin: After topical exposure: Corrosive.
Acute toxicity, LD50, Inhalation, Rat, 1.150 MG/L, 4 H. Result: Lungs, Thorax, or Respiration:Other changes. Gastrointestinal:Nausea or vomiting.

Irritation or Corrosion: Other Studies: CAS# 7697-37-2:
Acute toxicity, LC50, Inhalation, Rat, 67.00 ppm (NO2), 4 H.

Carcinogenicity/Other Information: ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CAS# 7664-38-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7664-38-2	Phosphoric acid	n.a.	n.a.	n.a.	n.a.
7697-37-2	Nitric acid	n.a.	n.a.	n.a.	n.a.
NA	Surfactant	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information: Environmental: No information available.
Physical: No information available.

CAS# 7697-37-2: Nitric acid: 100% mortality or 0% survival of organism., Brook Trout (Salvelinus fontinalis), 1562.5 UG/L, Mortality. Result: Affected fish lost equilibrium prior to death.
LC50, Green Or Europeon Shore Crab (Carcinus maenas), adult(s), 180000. UG/L, 48 H, Mortality. Result: Affected fish lost equilibrium prior to death.
LC50, Cockle (Cerastoderma edule), adult(s), 330000. - 1000000. UG/L, 48 H, Mortality. Result: Affected fish lost equilibrium prior to death.
LC50, Hooknose (Agonus cataphractus), adult(s), 100000. - 330000. UG/L, 48 H, Mortality. Result: Affected fish lost equilibrium prior to death.
LC50, Starfish (Asterias rubens), adult(s), 100000. - 330000. UG/L, 48 H, Mortality. Result: Affected fish lost equilibrium prior to death.
CAS# NA: Surfactant: LC50, Fathead Minnow (Pimephales promelas), 3.800 - 6.200 MG/L, 96 H. Result: Affected fish stopped schooling behavior. Affected fish became hyperactive. Fish were overreactive to external stimuli. Affected fish swam at or near surface. No loss of equilibrium observed.
LC50, Water Flea (Daphnia magna), 9.300 - 21.40 MG/L, 48 H. Result: Affected fish stopped schooling behavior. Affected fish became hyperactive. Fish were overreactive to external stimuli. Affected fish swam at or near surface. No loss of equilibrium observed.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Observe all federal, state, and local environmental regulations. 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 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Phoshoric Acid, Nitric 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

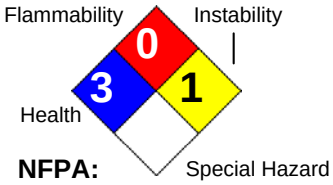
CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7664-38-2	Phosphoric acid	No	Yes 5000 LB	No
7697-37-2	Nitric acid	Yes 1000 LB	Yes 1000 LB	Yes
NA	Surfactant	No	No	No

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; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: Yes - 1805; NY Part 597: Yes; PA HSL: Yes - E
7697-37-2	Nitric acid	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: Yes - 1356; NY Part 597: Yes; PA HSL: Yes - E
NA	Surfactant	TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No

16. OTHER INFORMATION

Revision Date: 05/11/2015

Hazard Rating System:



NFPA:

Additional Information About This Product: No data available.

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