

# SAFETY DATA SHEET

**LpH 100 (aka) SAFE-pHix brand Acidic Calcium Sulfate, ACS 100. BioFluid 100, pHixr 100**

**Product ID:** MC2473, Acidic Calcium Sulfate

**Revised:** Oct. 24, 2016

**Replaces:** SDS Aug. 25, 2016

## 1. IDENTIFICATION

**Product Identifier:** LpH 100

**Other Identifiers:** MC2473, (ACS) Acidified Calcium Sulfate

**CAS Number:** MIXTURE NA

**Recommended Use:** Acidulant & Activator for ClO<sub>2</sub> Sanitation System for pathogen control - Lower pH

**Restrictions on Use:** Use as directed on label.

**Distributor:** SAFE-pHix LLC, 412 N. Main St. STE 100, Buffalo, Wyoming 82834

**Chemical Information:** 719-661-8200

**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

## 2. HAZARD(S) IDENTIFICATION

**GHS Classification(s):** Substance or mixture corrosive to metals Category 1  
Skin Irritation Category 2  
Eye Irritation Category 2A

Signal Word;  
**DANGER**



**Hazard Statements:** May be corrosive to metals. Causes skin irritation. Causes eye irritation.

If exposed or concerned: Get medical advice/attention. See First Aid Measures below Sect. 4

**Hazards Not Classified:** None known

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Mixture or Common Name/Synonyms</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Acidic Calcium Sulfate	NA	40-60%
Water	7732-18-5	40-60

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

## 4. FIRST-AID MEASURES

**Description of Necessary Measures:**

**Eye Contact:** If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

**Skin Contact:** If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Discard contaminated leather articles such as shoes and belt. Do not apply oils or ointments unless ordered by the physician.

**Inhalation:** If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention IMMEDIATELY.

**Ingestion:** If swallowed: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

**Most Important Symptoms/Effects, Acute and Delayed:** Contact with this material will cause burns to the skin, eyes and mucous membranes. Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Carbon dioxide. Dry chemical. Foam.

**Specific Hazards Arising from the Chemical:** During fire, gases hazardous to health may be formed.

**Fire and Explosion Hazards:** Water. Do not use water jet as an extinguisher, as this will spread the fire.

**Special Protective Equipment and Precautions for Fire-Fighters:** In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, Emergency Procedures:** CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

**Methods and Materials for Containment and Clean Up:** Contain spill, place into drums for proper disposal. Flush remaining area with water and neutralize with Soda Ash, Lime or strong soap solution, and dispose of properly. Avoid direct discharge of undiluted mixture to sewers and surface waters. Notify authorities if entry occurs.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Wear appropriate personal protective equipment. Do not get in eyes, on skin, on clothing. Do not breathe mist/vapor. Use good industrial hygiene practices. Do not empty into drains. NEVER add water to acid.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a well-ventilated place. Store away from incompatible materials. Store in containers designed for this type product and strength. Keep away from heat, sparks and open flame.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### OSHA Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Acidic Calcium Sulfate	1 mg/m <sup>3</sup>

### ACGIH Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Acidic Calcium Sulfate	0.2 mg/m <sup>3</sup> TWA (thoracic fraction)

**Engineering Controls:** Local exhaust ventilation, process enclosures, or other engineering controls are required when handling or using this product to avoid overexposure. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

#### **Individual Protection Measures:**

**Eye/Face Protection:** Wear chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Acid-proof. Chemical-resistant. Impervious. Protective gloves:

**Respiratory Protection:** Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved air-purifying respirator with: Acid gas cartridge and Dust/mist filter. NIOSH-Approved positive pressure supplied air respirator. NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator.

**Other Protective Equipment:** Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Rubber boots and gloves.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift. Food, beverages, and tobacco products should not be carried, stored or consumed where this material is in use.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Liquid.

**Color:** Clear. Colorless.

**Odor:** No odor.

**Odor Threshold:** N.D.

**pH:** < 2 (as is)

**Freezing Point (deg. F):** N.D.

**Melting Point (deg. F):** N.D.

**Initial Boiling Point or Boiling Range:** N.D.

**Flash Point:** N.A.

**Flash Point Method:** N.A.

**Evaporation Rate (nBuAc = 1):** N.D.

**Flammability (solid, gas):** N.D..

**Fire Point:** N.D.

**Lower Explosion Limit:** N.A.

**Upper Explosion Limit:** N.A.

**Vapor Pressure (mm Hg):** N.D.

**Vapor Density (air=1):** N.D.

**Specific Gravity or Relative Density:** 1.2865 @ 25 Deg. C

**Solubility in Water:** Complete

**Partition Coefficient (n-octanol/water):** N.D.

**Autoignition Temperature:** No Data

**Decomposition Temperature:** N.D.

**Viscosity:** N.D.

**Volatile (wt%):** N.D.

**VOC (lbs/gal):** N.D.

### **10. STABILITY AND REACTIVITY**

**Reactivity:** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur.

**Conditions to Avoid:** Contact with metal may release flammable hydrogen gas. Contact with incompatible materials. Do not mix directly with other chemicals, only into water as directed. To dilute: Add slowly to warm water; not water to product.

**Incompatible Materials:** Bases. Amines. Metals. Organic compounds. This product may react with reducing agents.

**Hazardous Decomposition Products:** Sulfur oxides.

### **11. TOXICOLOGICAL INFORMATION**

**Routes of Exposure:** Eyes. Ingestion. Inhalation and skin.

**Symptoms/Effects: Acute, Delayed and Chronic:**

**Eye Contact:** Causes eye burns. Permanent eye damage or blindness could result.

**Skin Contact:** May cause skin irritation or burns from prolonged contact.

**Skin Absorption:** No data available.

**Inhalation:** Vapors from misting will irritate throat and respiratory system and cause coughing.

**Ingestion:** Causes digestive tract burns. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicological Information:** Not harmful to aquatic life when used as directed when diluted in water or on fish/shrimp feed.  
**Chemical Fate Information:** o other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component

## 13. DISPOSAL CONSIDERATIONS

**Hazardous Waste Number:** D002

**Disposal Method:** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. Dilute this material residue and its container with water, then discard after rinsing with soapy water.

## 14. TRANSPORT INFORMATION

**DOT (Department of Transportation):**

**Identification Number:** UN3264  
**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(CONTAINS SULFURIC ACID)  
**Hazard Class:** 8  
**Packing Group:** II

## 15. REGULATORY INFORMATION

**TSCA Inventory Status:** All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

**SARA Title III Section 311/312 Category Hazards:**

<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>	<u>Reactive</u>			
Yes	Yes	No	No	Yes			
<u>Regulated Components:</u>	<u>CAS</u>	<u>CERCL</u>	<u>SARA</u>	<u>SARA</u>	<u>U.S.</u>	<u>WI</u>	<u>Prop</u>
<u>Component</u>	<u>Number</u>	<u>A</u>	<u>EHS</u>	<u>313</u>	<u>HAP</u>	<u>HAP</u>	<u>65</u>
		<u>RQ</u>					
Acidic Calcium Sulfate	NA	No	No	No	No	No	No

## 16. OTHER INFORMATION

**Hazard Rating System**

**Health:** 3  
**Flammability:** 0  
**Reactivity:** 2

**NFPA Rating System**

**Health:** 3  
**Flammability:** 0  
**Reactivity:** 2  
**Special Hazard:** WATER REACTIVE

**SDS Abbreviations :** N.A. = Not Applicable N.D. = Not Determined HAP = Hazardous Air Pollutant VOC = Volatile Organic Compound

C = Ceiling Limit N.E./Not Estab. = Not Established SDS Prepared by: NAO

**Revised:** Aug. 25, 2016

**Replaces:** SDS May 5, 2015

**Reason for Revision:** New format. Changes made throughout the SDS.