

# Safety Data Sheet

Safe<sub>2</sub>O ACS100<sup>®</sup>, FreshFlo 100<sup>®</sup>, pHresh 10<sup>®</sup>

**MIONIX**  
applied innovations

## Section 1 Product Description

**Product Name:** Safe<sub>2</sub>O ACS100  
**Recommended Use:** Acidulant  
**Synonyms:** FreshFlo 100, pHresh 10  
**Distributor:** Mionix Corporation 8127 Mesa Dr. Ste B206-273 Austin, TX 78759  
**Chemical Information:** 916-616-7037  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

## Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

### WARNING



**GHS Classification:**  
Corrosive to Metals  
Causes skin irritation  
Causes eye irritation

**Other Safety Precautions:** IF exposed or concerned: Get medical advice/attention.

**Acute Toxicity Dermal Contains** 100 % of the mixture consists of ingredient(s) of unknown toxicity

## Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Acidic Calcium Sulfate	NA	40-60
Water	7732-18-5	40-60

## Section 4 First Aid Measures

### Emergency and First Aid Procedures

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists: Get medical attention.  
**Skin Contact:** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.  
**Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

## Section 5 Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO<sub>2</sub> or appropriate foam.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Sulfur containing gases

## Section 6 Spill or Leak Procedures

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## Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Use appropriate personal protective equipment as stated in Section 8 of this MSDS. Advise the Environmental Protection Agency (EPA) and appropriate state agencies, if required. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Vacuum or sweep up material and place in a disposal container.

## Section 7 Handling and Storage

**Handling:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

**Storage:** Store locked up. Keep container tightly closed in a cool, well-ventilated place. Store in corrosive resistant container.

**Storage Code:** White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

## Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Acidic Calcium Sulfate	0.2 mg/m <sup>3</sup> TWA (thoracic fraction)	3mg/m <sup>3</sup>	1 mg/m <sup>3</sup> TWA	N/A

### Control Parameters

#### Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

#### Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

#### Respiratory Protection:

Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

#### Respirator Type(s):

None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

#### Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

#### Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

#### Gloves:

Natural latex, Neoprene, Nitrile, Butyl rubber

## Section 9 Physical Data

#### Formula:

**Vapor Pressure:** No data available

#### Physical State:

**Evaporation Rate (BuAc=1):** No data available

#### Appearance:

**Vapor Density (Air=1):** No data available

#### Odor:

**Specific Gravity:** 1.28-1.30

#### Odor Threshold:

**Solubility in Water:** Soluble

#### pH:

**Log Pow (calculated):** No data available

#### Melting Point:

**Autoignition Temperature:** No data available

#### Boiling Point:

**Decomposition Temperature:** No data available

#### Flash Point:

**Viscosity:** No data available

#### Flammable Limits in Air:

**Percent Volatile by Volume:** No data available

## Section 10 Reactivity Data

#### Reactivity:

Moderately reactive - See below

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**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** Excessive heat >100C and incompatibles.  
**Incompatible Materials:** Metals, Potassium chlorate, potassium perchlorate, potassium permanganate, sodium, lithium, bases, organic material, halogens, hydrides, strong oxides, reducing agents  
**Hazardous Decomposition Products:** Sulfur containing gases  
**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

**Routes of Entry:** Inhalation.  
**Symptoms (Acute):** Respiratory Irritation, Dermatitis, Coffee Ground Emesis  
**Delayed Effects:** Dental Erosion  
 Respiratory Irritation

**Acute Toxicity:**

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Not applicable		
Acidic Calcium Sulfate	N/A	ORAL LD50 Rat 2140 mg/kg		INHALATION LC50-2H Mouse 510 MG/M3 INHALATION LC50-2H Rat 510 MG/M3 INHALATION LC50-1H Rat 0.1N

**Carcinogenicity:**

Chemical Name	CAS Number	IARC	NTP	OSHA
Acidic Calcium Sulfate	N/A	Not listed	Not listed	Listed

**Chronic Effects:**

**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.

**Target Organ Effects:**  
**Acute:** No information available  
**Chronic:** Lungs

## Section 12 Ecological Data

**Overview:** Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.  
**Mobility:** This material is expected to have high mobility in soil. It absorbs weakly to most soil types.  
**Persistence:** Biodegradation, adsorption to sediment, and bioconcentration to aquatic organisms should not be significant.  
**Bioaccumulation:** Bioconcentration is not expected to occur.  
**Degradability:** Does not biodegrade readily.  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Acidic Calcium Sulfate	N/A	No data available

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** If discarded, this product is considered a RCRA corrosive waste, D002.

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## Section 14

## Transport Information

**Ground - DOT Proper Shipping Name:**

UN3264  
Corrosive Liquid, Acidic, Inorganic,  
N.O.S. (sulfuric acid solution saturated with calcium sulfate)  
Class 8  
P.G. II

**Air - IATA Proper Shipping Name:**

UN3264  
Corrosive Liquid, Acidic, Inorganic, NOS  
N.O.S. (sulfuric acid solution saturated with calcium sulfate)  
Class 8  
P.G. II

## Section 15

## Regulatory Information

**TSCA Status:** Acidic Calcium Sulfate may contain sulfuric acid (CAS 7664-93-9) which is listed on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Sulfuric Acid	7664-93-9	Sulfuric acid	1000 lb RQ	1000 lb final RQ; (454 kg)	1000 lb TPQ	No

## Section 16

## Additional Information

**Revised:** 03/18/2015

**Replaces:** None

**Printed:** 05-01-2015

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