



FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL: 1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)  
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)  
FOR ALL SDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: **POOLIFE® PH MINUS**

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Arch Chemicals, Inc.</b> 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004	REVISION DATE:	05/27/2015
	SUPERCEDES:	12/07/2009
	MSDS Number:	000000022981
	SYNONYMS:	Dry acid
	CHEMICAL FAMILY:	Sulfate
	DESCRIPTION / USE	pH and alkalinity adjuster for swimming pools
	FORMULA:	NaHSO <sub>4</sub>

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Skin irritation : Category 2  
Serious eye damage : Category 1

### GHS Label element

Hazard pictograms : 

Signal word : Danger

Hazard statements : H315 Causes skin irritation.  
H318 Causes serious eye damage.

Precautionary statements : **Prevention:**  
P264 Wash skin thoroughly after handling.  
P280 Wear eye protection/ face protection.  
P280 Wear protective gloves.  
**Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.



P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

**Storage:**

P402 + P404 Store in a dry place. Store in a closed container.

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

**Other hazards**

None known.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
SULFURIC ACID, MONOSODIUM SALT	7681-38-1	91.5 - 94.7
SULFURIC ACID DISODIUM SALT	7757-82-6	4.8 - 8.0

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### SECTION 4. FIRST AID MEASURES

Inhalation:	IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.
Skin Contact:	IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. Seek medical attention if irritation develops.
Eye Contact:	IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.
Ingestion:	IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.



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## SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA): Product is not known to be flammable, combustible, pyrophoric or explosive.

### Flammable Properties

Flash Point: Not applicable  
Autoignition Temperature: Not applicable  
Fire / Explosion Hazards: Material will not ignite or burn.  
Extinguishing Media: Not Applicable. - Choose extinguishing media suitable for surrounding materials.  
Fire Fighting Instructions: In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.  
Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.  
Upper Flammable / Explosive Limit, % in air: Not applicable  
Lower Flammable / Explosive Limit, % in air: Not applicable

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.

### Spill Mitigation Procedures

Air Release: Vapors may be suppressed by the use of water fog.  
Water Release: Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so. Contain all solids for treatment or disposal.  
Land Release: Sweep up and place in suitable clean, dry containers for reclamation or later disposal. Do not place spill materials back in their original containers.  
Additional Spill Information : Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.



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## SECTION 7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid breathing dust from this material.

Storage: Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed. Avoid contact with water, or moist air.

Incompatible Materials for Storage: strong alkalis

Do Not Store At temperatures Above: 175 °C

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.

### Protective Equipment for Routine Use of Product

Respiratory Protection : If dusting occurs, wear a NIOSH approved respirator.  
Respirator Type : NIOSH approved full-face air purifying respirator with an N95 filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin Protection : Wear impervious gloves to avoid skin contact.

Eye Protection: Use chemical goggles.

Protective Clothing Type: Butyl rubber, Neoprene

General Protective Measures: An eye wash and safety shower should be provided in the immediate work area.

### **Components with workplace control parameters**

no data available

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid  
Form granular  
Color: off-white  
Odor: pungent  
Molecular Weight: 120.00 g/mol  
pH : < 1.0 @ 5% aqueous solution  
Boiling Point: decomposes  
351 °F (177 °C)

Density:

No data.

Vapor Pressure:

Not applicable



Vapor Density:	Not applicable
Viscosity:	No data
Fat Solubility:	No data
Solubility in Water:	1080.00000 gm/l 68.00 °F
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	Not applicable
Oxidizing:	No data
Volatiles, % by vol.:	Not applicable
VOC Content	Not applicable
HAP Content	Not applicable

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## SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions. Not sensitive to mechanical shock. Not sensitive to static discharge. Will react in water to form a weak solution of sulfuric acid. Product will not undergo hazardous polymerization.
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures.
Chemical Incompatibility:	acids, Bases, oxidizers
Hazardous Decomposition Products:	Sulfur oxides
Decomposition Temperature:	315 °C - ,

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## SECTION 11. TOXICOLOGICAL INFORMATION

### Component Animal Toxicology

#### Oral LD50 value:

SULFURIC ACID, MONOSODIUM SALT	LD50 Believed to be 2,800 mg/kg	Rat
SULFURIC ACID DISODIUM SALT	LD50 = 5,989 mg/kg	Mouse
	LD50 Believed to be > 10,000 mg/kg	Rat

### Component Animal Toxicology

#### Dermal LD50 value:

SULFURIC ACID, MONOSODIUM SALT	No data
SULFURIC ACID DISODIUM SALT	no data available

### Component Animal Toxicology

#### Inhalation LC50 value:

SULFURIC ACID, MONOSODIUM SALT	No data
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SULFURIC ACID                      no data available  
DISODIUM SALT

Product Animal Toxicity

Oral LD50 value:                      LD50 Believed to be > 3,000 mg/kg    Rat

Dermal LD50 value:                      LD50 Believed to be > 2,000 mg/kg    Rabbit

Inhalation LC50                      No data

value:

Skin Irritation:                      DRY MATERIAL CAUSES MODERATE SKIN IRRITATION., WET MATERIAL CAUSES SKIN BURNS.

Eye Irritation:                      Corrosive to eyes.

Skin Sensitization:                      This material is not known or reported to be a skin or respiratory sensitizer.

Acute Toxicity:                      This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract. The dry material is irritating to the skin. However when wet, it will produce burns to the skin.

Subchronic / Chronic Toxicity:                      Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity:                      Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity:                      Not known or reported to be mutagenic.

SULFURIC ACID DISODIUM SALT                      This product was determined to be non-mutagenic in the Ames assay., This product has been shown to be negative for cell transformation in the Syrian hamster embryo (SA7/SHE) cell assay.

Carcinogenicity:                      This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

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## **SECTION 12. ECOLOGICAL INFORMATION**

Overview:                      Slightly toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: SULFURIC ACID DISODIUM SALT

Lepomis macrochirus (Bluegill sunfish)	-	96 h LC50 = 12,750 mg/l
Pimephales promelas (fathead minnow)	-	96 h LC50 = 7,960 mg/l
Gambusia affinis (Mosquito fish)	-	96 h LC50 = 3,710 mg/l
Daphnia magna (Water flea)	-	48 h LC50= 2,564 mg/l
Ceriodaphnia dubia	-	48 h LC50= 3,080 mg/l



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## **SECTION 13. DISPOSAL CONSIDERATIONS**

**CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.**

Waste Disposal Summary :                    If this product becomes a waste, it will be a nonhazardous waste.

Disposal Methods :                         As a nonhazardous solid waste it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes :        Not applicable

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## **SECTION 14. TRANSPORT INFORMATION**

**DOT**

Not dangerous goods

**TDG**

Not dangerous goods

**IATA**

Not dangerous goods

**IMDG-CODE**

Not dangerous goods

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## **SECTION 15. REGULATORY INFORMATION**

**WHMIS Classification**                    :    D2B: Toxic Material Causing Other Toxic Effects

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**



This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**Massachusetts Right To Know**

Sodium sulphate 7757-82-6

**Pennsylvania Right To Know**

Sodium hydrogensulphate 7681-38-1  
Sodium sulphate 7757-82-6

**New Jersey Right To Know**

Sodium hydrogensulphate 7681-38-1  
Sodium sulphate 7757-82-6

**California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

TSCA : The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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**SECTION 16. OTHER INFORMATION**

SECTIONS REVISED: 1  
Major References : Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .