



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL SDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE

USA: 1-423-780-2970)

1-800-424-9300 (OUTSIDE

USA: 1-703-527-3887)

1-800-511-MSDS (OUTSIDE

USA: 1-423-780-2347)

PRODUCT NAME: POOLIFE® FILTER CLEANER

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc.
1200 Bluegrass Lakes Parkway
Alpharetta, GA 30004

REVISION DATE:

02/11/2016

SUPERCEDES:

05/27/2015

MSDS Number:

000000023329

SYNONYMS:

none

CHEMICAL FAMILY:

Organic aqueous solution

DESCRIPTION / USE

Filter cleaner

FORMULA:

NOT APPLICABLE/MIXTURE

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	:	Category 4
Corrosive to metals	:	Category 1
Acute toxicity (Dermal)	:	Category 4
Skin irritation	:	Category 2
Serious eye damage	:	Category 1
Specific target organ toxicity - single exposure	:	Category 3 (Respiratory system)

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: H227 Combustible liquid.

POOLIFE® FILTER CLEANER

REVISION DATE : 02/11/2016

Page 1 of 12



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

H290 May be corrosive to metals.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary statements

: **Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P234 Keep only in original container.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P302 + P352 + P312 IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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/doctor.

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

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

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P390 Absorb spillage to prevent material damage.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P406 Store in corrosive resistant stainless steel container with a resistant inner liner.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.



SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Citric Acid	77-92-9	1 - 6
Butoxyethanol	111-76-2	5 - 10
ETIDRONIC ACID	2809-21-4	5 - 10
POLY(OXY-1,2-ETHANEDIYL), .ALPHA.- (NONYLPHENYL)-.	9016-45-9	5 - 10
Water	7732-18-5	64 - 84

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.
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.

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:	This material is not expected to burn unless all the water is boiled away. The remaining compounds may be ignitable.
Extinguishing Media:	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.



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

Hazardous Combustion Products: Carbon dioxide (CO₂)
Upper Flammable / Explosive Limit, no data available
% in air:
Lower Flammable / Explosive Limit, no data available
% in air:

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release:

Hazardous concentrations in air may be found in local spill area and immediately downwind. Vapors may be suppressed by the use of water fog. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.

Water Release:

This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.

Land Release:

Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container. Do not place spill materials back in their original containers. Decontaminate all clothing and the spill area using a detergent and flush with large amounts of water. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.

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.

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 mist or vapor.

Storage:

Store in a cool, dry and well ventilated place. Isolate from incompatible materials. Avoid freezing.

Incompatible Materials for Storage:

Refer to Section 10, "Incompatible Materials."



SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Protective Equipment for Routine Use of Product

Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible.

Respirator Type : A NIOSH approved air purifying respirator with organic vapor cartridge and N95 particulate 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 and a faceshield.

Protective Clothing Type: Impervious

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

Components with workplace control parameters

Components (CAS-No.)	Value	Control parameters	Basis (Update)
Butoxyethanol (111-76-2)	TWA	20 ppm	ACGIH (02 2014)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liquid

Form liquid

Color: clear

Odor: Heavy detergent odor

Molecular Weight: Not applicable/Mixture

pH : 1.0 - 3.0 (@ 25 Deg. C)

Boiling Point: 215.01 °F (101.67 °C)

Melting point/freezing point no data available

Density: 1.1380g/cc

Vapor Pressure: 17.00000000 (@ 25 Deg. C)

Vapor Density: no data available

Viscosity: Not applicable

Fat Solubility: no data available

Solubility in Water: soluble

Partition coefficient n-octanol/water: no data available

Evaporation Rate: LONZA-N09.00703720 1.00

Oxidizing: no data available

Volatiles, % by vol.: no data available



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

VOC Content

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489). This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

HAP Content

no data available

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:

Stable under normal conditions. Not sensitive to mechanical shock. Not sensitive to static discharge. Product will not undergo hazardous polymerization.

Conditions to Avoid:

High temperatures, Avoid freezing.

Chemical Incompatibility:

Strong oxidizing agents, Strong acids, strong alkalies

Hazardous Decomposition Products:

Carbon monoxide, Carbon dioxide, phosphorus oxides

Decomposition Temperature:

no data available

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

Citric Acid	LD50	= 3,000 mg/kg	Rat
Butoxyethanol	LD50	= 1,590 mg/kg	Rat
ETIDRONIC ACID	LD50	= 1,440 mg/kg	Rat
POLY(OXY-1,2-ETHANEDIYL), .ALPHA.- (NONYLPHENYL)-.	LD50	= 4,000 mg/kg	Rat

Component Animal Toxicology

Dermal LD50 value:

Citric Acid	LD50	Believed to be > 2,000 mg/kg	Rabbit
Butoxyethanol	LD50	580 mg/kg	Rabbit
ETIDRONIC ACID	LD50	> 4,764 mg/kg	Rabbit
POLY(OXY-1,2-ETHANEDIYL), .ALPHA.- (NONYLPHENYL)-.	LD50	> 2,000 mg/kg	Rabbit

Component Animal Toxicology

Inhalation LC50 value:

Citric Acid no data available

Butoxyethanol	LC50 4 h	486 ppm	Rat male
	LC50 4 h	450 ppm	Rat female



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

ETIDRONIC ACID no data available

POLY(OXY-1,2-ETHANEDIYL),
.ALPHA-
(NONYLPHENYL)-. Inhalation LC50 no data available

Product Animal Toxicity

Oral LD50 value: LD50 Believed to be approximately 3,700 mg/kg Rat

Dermal LD50 value: LD50 Believed to be approximately 1,700 mg/kg Rabbit

Inhalation LC50 value: no data available

Skin Irritation: This material is expected to be moderately irritating.

Eye Irritation: This material is expected to be corrosive.

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

Acute Toxicity: This product is corrosive to the eyes, moderately irritating to the skin and upon inhalation, may cause irritation to mucous membranes and respiratory tract.

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.

Citric Acid This chemical has been tested in laboratory animals and there was no evidence of reproductive toxicity or teratogenicity.

Butoxyethanol High dose levels of this chemical produced maternal toxicity, and embryoletality and fetal malformations.

ETIDRONIC ACID This product has been tested and was shown not to produce any adverse effects on reproductive function or fetal development when administered to laboratory animals.

Mutagenicity: Not known or reported to be mutagenic.

Citric Acid This product was determined to be non-mutagenic in the Ames assay. It was also shown to be negative in the Dominant lethal assay.

Butoxyethanol This material has been shown to be non-mutagenic in the majority of a battery of assays. Not expected to be a mutagenic hazard.

ETIDRONIC ACID This chemical has been tested and was shown to be non-mutagenic.

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

Citric Acid The carcinogenicity has been evaluated through animal study and it was found not to be carcinogenic.



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

Butoxyethanol

This material has been classified by the U.S. EPA as a "Group C" carcinogen (Suggestive Human Carcinogen), based on equivocal and limited evidence in laboratory animals. The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans.

ETIDRONIC ACID

This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. Chemicals of similar structure have been shown not to cause cancer in laboratory animals.

SECTION 12. ECOLOGICAL INFORMATION

Overview: No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: Citric Acid

- Lepomis macrochirus (Bluegill sunfish) - (static). 96 h LC50 = 1,516 mg/l
- Daphnia magna (Water flea) - 72 h EC50 approximately 120 mg/l

Ecological Toxicity Values for: Butoxyethanol

- Lepomis macrochirus (Bluegill sunfish) - static test 96 h LC50 = 1,490 mg/l
- Brine shrimp - static test 24 h LC50 = 1,000 mg/l
- Daphnia magna (Water flea) - static test 48 h EC50 > 1,000 mg/l
- Crangon crangon (shrimp) - 48 h LC50 = 800 mg/l

Ecological Toxicity Values for: ETIDRONIC ACID

- Bluegill - 96 h LC50 = 868 mg/l
- Rainbow trout (Salmo gairdneri), - 96 h LC50 = 368 mg/l
- Channel Catfish (Ictalurus punctatus rafinesque), - 96 h LC50 = 695 mg/l
- Sheepshead minnow - 96 h LC50 = 2,180 mg/l
- Daphnia magna, - 48 h EC50 = 527 mg/l
- Grass shrimp - 96 h LC50 = 1,770 mg/l
- Oyster Shell Deposition - 96 h EC50 = 89 mg/l
- Mallard duck - Oral LD50 > 2,510 mg/kg
- Bobwhite quail - Oral LD50 > 2,510 mg/kg



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

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 meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D002.

Disposal Methods : As a hazardous liquid waste it must be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : D002

SECTION 14. TRANSPORT INFORMATION

DOT

Not dangerous goods

TDG

UN number : 3265
Description of the goods : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Etidronic acid)
Class : 8
Packing group : III
Labels : 8

IATA

UN number : 3265
Description of the goods : Corrosive liquid, acidic, organic, n.o.s.
(Etidronic acid)
Class : 8
Packing group : III
Labels : 8
Packing instruction (cargo aircraft) : 856
Packing instruction (passenger aircraft) : 852
Packing instruction (passenger aircraft) : Y841

IMDG-CODE

UN number : 3265



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

Description of the goods : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Etidronic acid)
Class : 8
Packing group : III
Labels : 8
EmS Number 1 : F-A
EmS Number 2 : S-B

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302

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

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313:

Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)- .omega.-hydroxy-	9016-45-9	10 %
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Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

2-Butoxyethanol	111-76-2
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Pennsylvania Right To Know

2-Butoxyethanol	111-76-2
Etidronic acid	2809-21-4
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)- .omega.-hydroxy-	9016-45-9
Citric acid	77-92-9

New Jersey Right To Know

2-Butoxyethanol	111-76-2
Etidronic acid	2809-21-4
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)- .omega.-hydroxy-	9016-45-9
Citric acid	77-92-9

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), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION



**Arch
Chemicals,
Inc.**

SAFETY DATA SHEET

SECTIONS REVISED:

3, 8, 11

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. .