



SAFETY DATA SHEET
4 in 1 Clarifier - 0700

Product Name: 4 in 1 Clarifier
Date: 6/8/2015

SECTION 1 **IDENTIFICATION**

Supplier: Phoenix Products Company
55 Container Drive
Terryville, CT 06786
(860) 589-7502
Distributor:

U.S. PERS Emergency Telephone: 1-800-633-8253

Product Name: **4 in 1 Clarifier**

Synonyms: Polyquaternary Amine; 1,2-Ethanediamine, polymer with

(chloromethyl)oxirane and N-methylmethanamine

Chemical Name: Poly(dimethylamine-co-epichlorohydrin-co-ethylene)

Chemical Formula: C₇H₂₀ClN₃O

CAS Number: 42751-79-1

Product Use: Clarifies pool water.

SECTION 2 **HAZARDOUS COMPONENTS**

EMERGENCY OVERVIEW

Caution



GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Hazard Statement(s)

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary Statement(s)

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.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

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

P337+P313: If eye irritation persists: Get medical advice/ attention.

P362+P364: Take off contaminated clothing and wash before reuse.

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

P405: Store locked up.

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



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Cancer Statement: This product (or any component at a concentration of 0.1% or greater) is not listed by the NTP, IARC, OSHA or EPA as a carcinogen.

SECTION 3 **COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS Number</u>	<u>Percent</u>
Poly(dimethylamine-co-epichlorohydrin-co-ethylene)	42751-79-1	3%-12%

*Trace components are present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens).

SECTION 4 **FIRST-AID MEASURES**

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin Contact: Wash off with soap and plenty of water. Consult a physician.

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5 **FIRE FIGHTING MEASURES**

Extinguishing Media

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: Nature of decomposition products not known.

Advice for Firefighters: Wear self contained breathing apparatus for firefighting if necessary.

SECTION 6 **ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions: Do not let product enter drains.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7 **HANDLING AND STORAGE**

Precautions for Safe Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.



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Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8	EXPOSURE CONTROLS/PERSONAL PROTECTION
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Control Parameters

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

Exposure Controls

Appropriate Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal Protective Equipment

Eye/Face Protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure: Do not let product enter drains.

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
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Appearance:	Blue liquid
Odor:	Ammoniacal odor
Odor Threshold:	Not Available
pH:	5-7
Melting Point/Freezing Point:	20°F to 32°F
Initial Boiling Point and Boiling Range:	116.1°C at 760 mmHg
Flash Point:	33.9°C
Evaporation Rate:	<1 (n-Butyl Acetate=1)
Flammability (solid, gas):	Not Available
Upper/Lower Flammability or Explosive Limits:	Not Available
Vapor Pressure:	22mmHg at 25°C
Vapor Density:	Not Available
Relative Density:	1.14 g/mL at 25°C (77°F)
Specific Gravity (H2O=1):	1.14
Water Solubility:	Complete
Percent Volatile By Volume:	50-80
Partition Coefficient (n-octanol/water):	Not Available



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Auto-ignition Temperature: Not Available
Decomposition Temperature: Not Available
Viscosity: 400 to 9000cP at (77°F), Brookfield RVT (sp#4 @ 10 rpm)
Explosive Properties: Not Available
Oxidizing Properties: Not Available

SECTION 10 **STABILITY AND REACTIVITY**

Reactivity: Not Available

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Not Available

Conditions to Avoid: Do not allow freezing. Do not mix with other chemicals.

Incompatible Materials: Strong oxidizing agents, Chlorine, Peroxides, Nitric acid

Hazardous Decomposition Products: Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, ammonia, oxides of nitrogen and/or hydrogen chloride.

Polymerization: Hazardous polymerization will not occur.

SECTION 11 **TOXICOLOGICAL INFORMATION**

Acute Toxicity: Not Available

Skin Corrosion/Irritation: Moderate skin and eye irritant.

Serious Eye Damage/Eye Irritation: Not Available

Respiratory or Skin Sensitization: Mists may irritate respiratory tract if exposure is prolonged.

Germ Cell Mutagenicity: Not Available

Carcinogenicity

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.

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.

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.

Reproductive Toxicity: Not Available

Specific target organ toxicity - single exposure: Not Available



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Specific target organ toxicity - repeated exposure: Not Available

Aspiration Hazard: Not Available

SECTION 12 **ECOLOGICAL INFORMATION**

Toxicity: 48-Hour Static Acute Mysidopsis bahia Toxicity Test: LC50 = 15 mg/L
96-Hour Static Acute Pimephales promelas Toxicity Test: LC50 = 0.34 mg/L
48-Hour Static Acute Ceriodaphnia dubia Toxicity Test: LC50 = .33 mg/L
48-Hour Static Acute Ceriodaphnia dubia Toxicity Test: Survival NOEC = .25 mg/L

Persistence and Degradability: Not Available

Bioaccumulative Potential: Not Available

Mobility in Soil: Not Available

Results of PBT and vPvB Assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

SECTION 13 **DISPOSAL CONSIDERATIONS**

Waste Treatment Methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

SECTION 14 **TRANSPORTATION DATA**

DOT: Not Dangerous Goods

TDG: Not Dangerous Goods

MEX: Not Dangerous Goods

IMDG: Not Dangerous Goods

IATA: Not Dangerous Goods

SECTION 15 **REGULATORY INFORMATION**

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

SARA 313 Components: 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.

SARA 311/312 Hazards: Acute Health Hazard



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Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components:	CAS-No.	Revision Date
Polyquaternary Amine	42751-79-1	

New Jersey Right To Know Components:	CAS-No.	Revision Date
Polyquaternary Amine	42751-79-1	

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16	<i>ADDITIONAL INFORMATION</i>
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No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers.

Date: 6/8/2015
Phoenix Products Company