

PRODUCT NAME: polyclean **CLARIFIER**
REVISION DATE: **3/15/2015****Section 1 IDENTIFICATION****Supplier:** Phoenix Products Company
55 Container Drive
Terryville, CT 06786
(860) 589-7502**Distributor:** PolyScience
6600 W. Touhy Ave.
Niles, IL 60714
(847)647-0611**Emergency Telephone:** U.S. PERS: 1-800-633-8253
International PERS: 1-801-629-0667**Section 2 HAZARDOUS COMPONENTS****Signal Word: CAUTION****Hazard Statements:** -Causes eye irritation.
-May cause respiratory irritation.**Precautionary Statements:** -P273: Avoid release to the environment.
-P280: Wear protective gloves/protective clothing/eye protection/face protection.
-P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
-P337+P313 If eye irritation persists: Get medical advice/ attention.**Primary Routes of Entry:** Eye Contact, Inhalation
Eye Hazards: Causes eye irritation.
Skin Hazards: Non-irritant to skin.
Ingestion Hazards: Ingestion is not expected to be a primary route of exposure.
Inhalation Hazards: May cause respiratory tract irritation.
Signs and Symptoms: Irritation of Eyes and Respiratory Passages.**Section 3 COMPOSITION/INFORMATION ON INGREDIENTS**

COMPONENT	CAS-NO.	WEIGHT %
Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride]	31512-74-0	<15%
Water	7732-18-5	>85%

**While some substances are claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.1200(i), All known hazards are clearly communicated within this document.*

Product Description: Clear pale yellow/brown liquid having a slight odor**Type of product and use:** Cleans, washes, or prepares the surface for application of a registered disinfectant intended to kill biofilm.

Section 4 FIRST-AID MEASURES

- Eye Exposure:** Flush immediately with copious amounts of tap water or normal saline (minimum of 15 minutes). Take exposed individual to a health care professional, preferably an ophthalmologist, for further evaluation.
- Skin Exposure:** Wash exposed area with plenty of water. Repeat washing. Remove contaminated clothing and wash thoroughly before reuse. If irritation persists consult a health care professional
- Inhalation:** If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek a health care professional immediately.
- Ingestion:** DO NOT INDUCE VOMITING. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving one (1) to two (2) glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose or convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of intentional ingestion of the product seek medical assistance immediately; take individual to nearest medical facility.

Section 5 FIRE FIGHTING MEASURES

- Flammable Limits:** Flash Point >212 ° F
Flash Point Method: Closed Cup
- Extinguishing Media:** Water fog, carbon dioxide, foam, dry chemical.
- Special Firefighting:** Fire-fighters should wear positive pressure self-contained breathing apparatus
- Procedures:** (SCBA) and full turnout gear. Cool containers with water spray. On small fires, use water spray or fog. On large fires, use heavy deluge or fog streams. Flooding amounts of water may be required before extinguishment can be accomplished.

Section 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Before responding to a spill or leak of this product, review each section of this SDS. Follow the recommendations given in the Handling and Storage sections. Check the Fire and Explosion Data section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritating fumes are present, consider evacuation of enclosed areas.

METHODS FOR CLEANING UP: Initially minimize area affected by the spill or leak. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.). Based on the product's toxicological and chemical properties, and on the size and location of the spill or leak, assess the impact on contaminated environments (e.g. water systems, ground, air equipment, etc.). There are no methods available to completely eliminate any toxicity this product may have on aquatic environments. Minimize adverse effects on these environments. . Determine if federal, state, and/or local release notification is required (see Regulatory Classifications section of this SDS). Recover as much of the pure product as possible into appropriate containers. Later, determine if this recovered product can be used for its intended purpose. Address clean-up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil, or commercially available absorbents may be used to recover any material that cannot readily be recovered as pure product. Flushing residual material to an industrial sewer, if present at the site of a spill or leak incident, may be acceptable if authorized approval is obtained first. If product and/or spill/leak residuals are flushed to an industrial sewer, insure that they do not come into contact with incompatible materials. Contact the person(s) responsible for the operation of your facility's industrial sewer system prior to intentionally flushing or pumping spills or leaks of this product to the industrial sewer.

Section 7 HANDLING AND STORAGE

HANDLING: Eye-wash fountains in the work place are recommended. Rubber gloves, safety glasses or goggles and body protective clothing and shoes are required. The handling precautions for this product are based on the characteristics of the neat product unless otherwise specified.

STORAGE: Do not contaminate water, food or feed by storage and disposal. Keep container closed when not in use. Store in an area inaccessible to children and persons unfamiliar with its use. Leaking or damaged containers must be placed in a plastic bag and discarded in the trash. Mop up spills with clear water.

WORK/HYGIENIC PRACTICES: Use safe chemical handling procedure suitable for the hazards presented by this material. Do not contaminate Water, Food or Feed by storage or cleaning equipment.

Section 8 EXPOSURE CONTROL/PERSONAL PROTECTION
EXPOSURE LIMITS

COMPONENTS	ACGIH-TLV Data	OSHA (PEL) Data
Poly[oxyethylene(dimethyliminio)ethylene (dimethyliminio) ethylene dichloride]	Not determined	Not Determined

1. Effects from Acute Exposure:

- Exposure:** Slightly hazardous in case of eye contact (irritant).
- Skin Exposure:** Slightly hazardous in case of skin contact (irritant). Non-sensitizer to skin. Skin inflammation is characterized
- Eye:** by itching, scaling, reddening or, occasionally, blistering.
- Inhalation:** Slightly hazardous in case of inhalation. Effects will depend on concentration and length of time of exposure.
- Ingestion:** Ingestion is not expected to be a primary route of exposure.

2. Effects from Chronic Exposure: The effects from chronic exposure to this product have not been fully evaluated.

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

<i>Appearance:</i>	Clear pale yellow/brown liquid
<i>Odor:</i>	Mild
<i>Odor Threshold (ppm):</i>	Not Applicable
<i>Density:</i>	1.15
<i>Evaporator Rate:</i>	Not Applicable
<i>Flash Point:</i>	Closed Cup: 100°C (212°F). (Tagliabue)
<i>Melting/Freezing Point:</i>	-16°C (3.2°F)
<i>Boiling Point:</i>	>100°C (212°F)
<i>Solubility:</i>	Easily soluble in cold water. Easily soluble in hot water.
<i>pH (Neat) :</i>	6 to 8
<i>pH (100 ppm in water) :</i>	6-7
<i>Vapor Pressure:</i>	Not Available
<i>Specific Gravity:</i>	1.07
<i>o/w Partition Coefficient:</i>	Not Available
<i>Oxidizing/Reducing Properties:</i>	Not Available
<i>Viscosity:</i>	Kinematic: 125 cSt
<i>Vapor Density:</i>	Not Applicable
<i>Vapor Pressure:</i>	3.2 kPa/ 23.8 mmHg (25°C)

NOTE: The physical data presented above are typical values and should not be construed as specifications.

Section 10 STABILITY AND REACTIVITY

Conditions To Avoid:	High temperature. Poor ventilation. Contamination.
Stability:	This product is stable under normal conditions
Polymerization:	Hazardous polymerization will not occur under normal conditions
Hazardous Decomposition Products:	None Known
Incompatible Materials:	Anionic polymers.

Section 11 TOXICOLOGICAL INFORMATION**Poly(oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride) CAS # 31512-74-0**

Acute Effects: Acute Oral (LD₅₀) = 1951 mg/kg Male rat - 2587 mg/kg Female rat
Acute Dermal (LD₅₀) = 2000 mg/kg Rabbit
Acute Inhalation (LC₅₀) = 2.9 mg/l (4 hours) Rat

Irritant/Sensitization Effects: Slightly hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant). Non-sensitizer to skin. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering. Slightly hazardous in case of inhalation. Effects will depend on concentration and length of time of exposure.

Carcinogenic Potential: A two year rat carcinogenicity study showed a slight increase in c-cell adenomas in female rats. Studies with male rats and male and female mice did not show any evidence of carcinogenic response. This product is not considered a carcinogen.

Target Organs Effects: May cause damage to the following organs: upper respiratory tract, skin, eyes.

Other Health Effects: None known.

Section 12 ECOLOGICAL INFORMATION**Poly(oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride) CAS # 31512-74-0**

LC ₅₀ = 0.37 mg/l	48 hours invertebrate
LC ₅₀ = 0.26 mg/l	96 hours Fathead minnow
LC ₅₀ = 0.21 mg/l	96 hours Bluegill sunfish
LC ₅₀ = 0.047 mg/l	96 hours Rainbow trout
LC ₅₀ = >600 mg/l	96 hours Sheepshead minnow
LC ₅₀ = 13 mg/l	96 hours Mysid shrimp

Section 13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction or fire.

CONTAINER: Non-refillable container. Do not refill or reuse this container. Triple rinse or equivalent before discarding in trash.

Section 14 TRANSPORT INFORMATION**DOT:** Not Regulated**IMO:** Not Regulated**ICAO/IATA:** Not Regulated**Section 15 REGULATORY INFORMATION****FDA:** This product is not allowed for food contact uses.**SARA:** *SARA 302 Extremely Hazardous Substances List...* No components of this product are listed.
SARA 312 Hazard Category... Immediate (Acute) Health Hazard.
SARA 313 Toxic Chemicals List... No components of this product are present above the *de minimus* levels**TSCA (Toxic Substances Control Act) Applicability:** Not Applicable.**NSF:** This product is listed by the NSF under NSF/ANSI Standard 60 for use in potable water applications with the following maximum allowable use rates: Concentrations of 2-5 ppm can be used at the initiation of treatment for up to 21 days. Thereafter, the maximum use rate is 0.5 ppm for potable water systems.**NFPA CODES:** Health = 1, Fire = 1, Reactivity = 0**Hazard Scale:** 0 = Minimal: 1 = Slight: 2 = Moderate: 3 = Serious: 4 = Severe: * = Chronic hazard**Section 16 OTHER INFORMATION**

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 the information refers.

END OF SAFETY DATA SHEET
Phoenix Products Company
Revision 3/15/2015
Supersedes 2/2/2015