



Product Name: Azure Poly 60 Algaecide
Date: 5/7/2015

SECTION 1 **IDENTIFICATION**

Supplier: Nava Water Products
95 MacCorkle Avenue SW
South Charleston, WV 25303
Tel: 1-800-811-2327

Emergency Telephone: **Medical** (800) 720-9236; **Chemtrec:** (800) 424-9300
Product Name: **Azure Poly 60 Algaecide**
Synonyms: Polyquaternium 42; Polixetonium chloride; WSCP
Chemical Name: Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride]
Chemical Formula: $(C_{10}H_{24}Cl_2N_2O)_n$
CAS Number: 31512-74-0
Product Use: Pool & Spa Algaecide

SECTION 2 **HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW
CAUTION

Primary Routes of Entry: Skin Contact, Eye Contact, Inhalation
Eye Hazards: Causes eye irritation.
Skin Hazards: Causes skin irritation.
Ingestion Hazards: Harmful if swallowed.
Inhalation Hazards: Causes respiratory tract irritation.
Signs And Symptoms: Irritation of Eyes and Respiratory Passages.

Effects from Acute Exposure:

Eye 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 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.

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

*For GHS required information see SECTION 15: *REGULATORY INFORMATION*.

SECTION 3 **COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS Number</u>	<u>Percent</u>
Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride]	31512-74-0	60%



SECTION 4 FIRST-AID MEASURES

Eye Contact: 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 Contact: 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: Not available.

Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.

Special Firefighting Procedures: Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill and Leak Response Guidelines: Important: Before responding to a spill or leak of this product, review each section of this SDS. Check Section 5: Fire fighting Measures 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 (Section 10). If irritating fumes are present, consider evacuation of enclosed areas.

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 Section 15: Regulatory Information). 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. 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
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Handling Precautions: Avoid contact with eyes. Wash hands before eating, drinking, or smoking. Use safe chemical handling procedures. Do not contaminate Water Food or Feed by storage or cleaning of equipment.

Storage Precautions: Store in a cool dry place. Keep out of reach of children. Do not contaminate water, food or feed by storage.

SECTION 8	EXPOSURE CONTROLS/PERSONAL PROTECTION
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Permissible Exposure Limits						
CAS No.	OSHA		WISHA		ACGIH (TLV)	
	TWA	STEL	TWA	STEL	TWA	STEL
31512-74-0	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Engineering Controls: Local exhaust acceptable. Special exhaust not required.

Eye/Face Protection: Safety glasses with side shields or goggles recommended.

Skin Protection: Chemical-resistant gloves.

Respiratory Protection: General room ventilation is normally adequate.

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
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Appearance:	Clear, pale yellow, liquid.
Odor:	Mild.
Density:	1.15
Flash Point: Closed cup:	>100°C (212°F). (Tagliabue.)
Melting/Freezing Point:	-16°C (3.2°F).
Boiling Point:	>100°C (212°F)
Solubility:	Easily soluble in cold water. Easily soluble in hot water.
pH (Neat):	7 [Neutral.]
pH (100 ppm in water):	6 - 7.
Vapor Pressure:	Not available.
o/w Partition Coefficient:	Not available.
Oxidizing/Reducing Properties:	Not available.
Viscosity: Kinematic:	125 cSt.
Additional pH Information:	pH (neat) = 6.0 – 8.0.

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

SECTION 10	STABILITY AND REACTIVITY
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Stability: Stable under normal conditions of use and storage.

Incompatibility: Anionic polymers.

Hazardous Decomposition Products: Carbon monoxide may be formed upon burning



SECTION 11	TOXICOLOGICAL INFORMATION
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Acute Effects:

Acute	Oral	(LD50) = 1951 mg/kg Male rat
Acute	Oral	(LD50) = 2587 mg/kg Female rat
Acute	Dermal	(LD50) = > 2000 mg/kg Rabbit
Acute	Inhalation	(LD50) = 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
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LC50 = 0.37 mg/l 48 hours Invertebrate
 LC50 = 0.26 mg/l 96 hours Fathead minnow
 LC50 = 0.21 mg/l 96 hours Bluegill sunfish
 LC50 = 0.047 mg/l 96 hours Rainbow trout
 LC50 = > 600 mg/l 96 hours Sheepshead minnow
 LC50 = 13 mg/l 96 hours Mysid shrimp

SECTION 13	DISPOSAL CONSIDERATIONS
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Note: Follow federal, state, and local regulations governing the disposal of waste materials.

Contaminated Materials: Determine if waste containing this product can be handled by available industrial effluent system or other on-site waste management unit. If off-site management is required, contact a company experienced in industrial waste management. This product is not specifically listed in 40 CFR 261 as a Resource Conservation and Recovery Act (RCRA) hazardous waste. However, spill or leak residuals may meet the criteria of a characteristic hazardous waste under this Act. Check the characteristics of the material to be disposed of and/or the physical and reactivity data given in this MSDS for the neat product.

Container Disposal: Empty containers, as defined by appropriate sections of the RCRA, are not RCRA hazardous wastes. However, insure proper management of any residuals remaining in container.

SECTION 14	TRANSPORTATION DATA
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DOT:		Not Regulated
TDG:		Not Regulated
MEX:		Not Regulated
IMDG:	UN Number:	3082
	UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Cationic Polymer)
	Transport Hazard Class:	9
	Packing Group:	III
	Marine Pollutant:	Yes
	EMS-No:	F-A, S-F
IATA:		Not Regulated



SECTION 15	REGULATORY INFORMATION
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*This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: EPA Reg. No. 48520-17-75217.

-The signal word **CAUTION** is not recognized by the GHS requirements and therefore would not be present on a GHS label or SDS.

-OSHA Regulatory Status: This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122). Not a dangerous substance or mixture according to the **Globally Harmonized System (GHS)**.

The following Regulations are known to apply to the use and disposal of this product. Additional Federal, State and Local regulations may also be applicable.

SARA (Superfund Amendments and Reauthorization Act)

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.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

No components of this product are present above the de minimus levels.

RCRA (Resource Conservation and Recovery Act) Listed Hazardous Waste

No components of this product are listed.

CWA (Clean Water Act) Listed Substances

No components of this product are listed.

FDA (Food and Drug Administration)

This product is not allowed for food contact uses.

National Sanitation Foundation (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.

TSCA (Toxic Substances Control Act) Applicability

All components may not be listed on the TSCA Inventory. Registered pesticides are exempt from the requirements of TSCA.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)

This product is a registered pesticide.

HMIS/NPCA Ratings:	Health: 1	Flammability: 1	Reactivity: 0
NFPA Ratings:	Health: 1	Flammability: 1	Reactivity: 0

SECTION 16	ADDITIONAL INFORMATION
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All sections reformatted in accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, NAVA Water Products makes no representations as to the



SAFETY DATA SHEET

Azure Poly 60 Algaecide – AS_0400_AZ

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