1. Product and Company Identification

Effective Date: 05-06-2004

Revision: 00

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Sildate Algicide, Algicide, Algicide Pro 30 & 60, Winter Algicide, Algicil, Algicide 60, Algicide 30, Poly 10

Principal Use: Algaecide

Description: Clear, pale yellow liquid

N. Jonas and Co., Inc.

4520 Adams Circle P.O. Box 425 Bensalem, PA 19020-0425

Telephone: (215) 639-8071

Only in the Event of a Transportation Emergency Involving Spills, Leaks, Fires or Accidents, call CHEMTREC at (800) 424-9300.

2. Composition/Information on Ingredients

Ingredients: %(w/w) OSHA PEL
Poly[oxyethylene (dimethyliminio) ethylene 60 Not Listed (dimethyliminio)ethylene dichloride] (CAS 31512-74-0)

Ingredients not precisely identified are proprietary or non hazardous. Values are not product specifications.

3. Hazards Identification

Emergency Overview

Appearance:

Clear, pale yellow liquid

Physical Hazards:

None

Health Hazards:

May cause slight irritation to eyes and skin.

Potential Health Effects:

General:

This health hazard assessment based on information from commercial and scientific literature.

Ingestion:

Relative to other materials, this product is classified as "moderately toxic" to humans.

Eye Contact:

Slightly irritating upon contact with eyes.

^{*} Hazard summary defined by OSHA Hazard Comm. Std., 29 CFR 1910.1200.

Skin Contact:

Slightly irritating upon contact with skin.

Skin Absorption:

This product will probably not be absorbed through human skin.

Inhalation:

Slightly irritating upon inhalation.

4. First Aid Measures:

First Aid - Eyes:

In case of contact, immediately flush eyes with plenty of watre for at least 15 minutes. Have eyes examined and treated by medical personnel.

First Aid - Skin:

In case of contact, wash skin with plenty of soap and water. If irritation develops, consult medical personnel.

First Aid - Ingestion:

Do not induce vomiting. Rinse with large amounts of water or milk, first irrigate the esophagus and dilute stomach contents by slowly giving 1 or 2 glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semicomatose, comatose or convulsing. Do not give fluids by mouth to an unconscious person

First Aid - Inhalation:

If exposure by inhalation is suspected, immediately move exposed person to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek a health care professional immediately.

5. Fire Fighting Measures

Flashpoint and Method:

Will not flash

Autoignition Temperature:

Not applicable

Explosive Limits:

Not applicable

General Hazards:

Prevent human exposure to fire, smoke, flames or products of combustion.

Fire Fighting Instructions:

Use water fog, carbon dioxide, foam or dry chemical.

Fire Fighting Equipment:

Self-contained breathing apparatus with full facepiece and protective clothing.

Hazardous Combustion Products:

Carbon monoxide may be formed upon burning.

6. Accidental Release Measures

Spill Measures:

Avoid skin and eye contact with liquid. Soak up material and shovel into a chemical waste container. Remove container from work area.

7. Handling and Storage

Handling:

Wear skin and eye protective equipment. Avoid breathing vapors or spray mists.

Storage:

Store in a cool, dry, well ventilated area.

8. Exposure Controls/Personal Protection

Exposure Guidelines:

No ACGIH TLV or OSHA PEL assigned to this product. Minimize exposure in accordance with good hygiene practice.

Engineering Controls:

Use ventilation adequate to maintain safe levels. Provide eyewash station and safety shower in work area.

Respiratory Protection:

Use MSHA/NIOSH approved respirator for organic vapors, dusts and fumes whose TLV is greater than 0.05 mg/m3.

Protective Clothing:

Wear appropriate protective equipmen to prevent skin contact.

Eye Protection:

Wear protective eyewear to prevent contact with this substance.

9. Chemical and Physical Properties

<u>Appearance:</u> Clear, pale yellow liquid <u>Boiling Point:</u> >100 deg. C. (>212 deg. F.)

Vapor Pressure:No dataVapor Density:No dataSolubility in Water:Soluble

<u>pH:</u> 7

<u>Specif. Grav./Density:</u> No data % Volatile: No data

10. Stability and Reactivity

Stability:

Stable under normal conditions.

Incompatibility:

Anionic polymers

Hazardous Decomposition Products:

Carbon monoxide may form upon burning.

Hazardous Polymerization:

Will not occur.

11. Toxicological Information

Possible Human Health Effects:

Inhalation:

The acute LC50 (4-hour - rat) is 2,9 ppm. Slightly hazardous in case of inhalation. Effects will depend on concentration and length of time of exposure.

Skin Contact:

The acute dermal LD50 (Rabbit) is >2,000 mg/kg.

Eye Contact:

Slightly hazardous in case of eye contact (irritation).

Ingestion:

The acute oral LD50 for the male rat and female rat are 1,951 mg/kg and 2,587 mg/kg, respectively.

Other Effects of Overexposure:

None known

Note to Physician:

Not applicable

12. Ecological Information

The LC50 values for various aquatic species are as follows:

Invertebrates - 0.37 mg/l (48 hours)

Fathead minnow - 0.26 mg/l (96 hours)

Bluegill sunfish - 0.21 mg/l (96 hours)

Rainbow trout - 0.047 mg/l (96 hours)

Sheepshead minnow - >600 mg/l (96 hours)

Mysid shrimp - 13 mg/l (96 hours)

This product is completely soluble in water. Care should be taken to minimize release of undiluted product into the environment.

13. Disposal Consideration

Disposal Method:

Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

Container Disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute, furnish, reuse empty container except for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy container before disposal.

14. Transport Information

DOT Hazard Description:

Not regulated

15. Regulatory Information

TSCA (Toxic Substances Control Act) Regulations, 40 CFR 710:

All ingredients are listed on the TSCA Chemical Substances Inventory.

CERCLA and SARA Regulations (40 CFR 355, 370, 372):

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

California Proposition 65:

None

16. Other Information

The information herein is given in good faith, but no warranty, expressed or implied, is made.

HMIS and NFPA Ratings

Hazard:	HMIS Ratings:	NFPA Ratings:
Health:	1	1
Flammability:	1	1
Reactivity:	1	0

HMIS and NFPA Hazard Rating Codes:

0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Severe

NOTE: These HMIS and NFPA Ratings are for "new" product. See appropriate sections of this MSDS for specific hazard information and safe handling instructions.