

Material Safety Data Sheet



50% POLY QUAT ALGAECIDE (COMBAT 50)

SECTION I - IDENTIFICATION

MANUFACTURER'S NAMEHaviland Consumer Products, Inc.
MANUFACTURER'S ADDRESS421 Ann St., NW, Grand Rapids, MI 49504
PHONE NUMBER..... (616) 361-6691
EMERGENCY PHONE NUMBERCHEMTREC (800) 424-9300
EFFECTIVE DATE.....7/16/04
TRADE NAME.....**50% POLY QUAT ALGAECIDE (COMBAT 50)**
CHEMICAL FAMILY.....Poly Quaternary

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	OSHA PEL	TLV (Units)	CAS NUMBER
Poly [oxyethylene (dimethyliminio) ethylene- (dimethyliminio) ethylene dichloride]	Not Established	Not Established	31075-24-8

SECTION III - PHYSICAL DATA

BOILING POINT>212°F (>100°C)
FREEZING POINT< 0°C
VAPOUR PRESSURE 14.7 @ 20°C
VAPOUR DENSITY (air=1) Vapor is Water
SOLUBILITY IN H2O..... Complete with water, insoluble in most organic solvents.
ODOUR AND APPEARANCE Clear, pale yellow Liquid; Mild Odor
SPECIFIC GRAVITY 1.13
pH..... 6-8

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT AND METHOD OF DETERMINATIONNone
LOWER EXPLOSIVE LIMIT (% by Volume) Not Applicable
UPPER EXPLOSIVE LIMIT (% by Volume) Not Applicable
MEANS OF EXTINCTION.....Dry chemical water foam or carbon dioxide. Water should be used to cool surrounding containers.
SPECIAL FIRE FIGHTING PROCEDURES.....None Currently Known
UNUSUAL FIRE HAZARD.....None Currently Known

SECTION V - HEALTH HAZARD DATA

CARCINOGENICITY, REPRODUCTIVE EFFECTS None
NTP?..... No
IARC MONOGRAPHS?..... No
OVER EXPOSURE EFFECTS Irritation to eyes. May cause irritation or corrosion of mucous membranes and the lungs. Exposed individuals should be monitored for respiratory distress, bronchitis or pneumonia.
PRIMARY ROUTE (S) OF ENTRY Eye Contact and inhalation
SPECIFIC FIRST AID PROCEDURES In case of contact: Immediately wash eyes and skin with plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation persists, seek medical attention immediately. If inhaled: Remove to fresh

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air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek a health care professional immediately. If swallowed: Get medical attention immediately. DO NOT induce vomiting. Rinse mouth with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving one or two glasses of water or milk.
None Currently Known

EXPOSURE AGGRAVATED MEDICAL
CONDITIONS

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY Stable
CONDITIONS TO AVOID Not Applicable
INCOMPATIBLE MATERIALS Anionic polymers
HAZARDOUS DECOMPOSITION PRODUCTS Unknown, but carbon monoxide may be released on burning.
HAZARDOUS POLYMERIZATION Will Not Occur
POLYMERIZATION AVOID Not Applicable

SECTION VII - SPILL OR LEAK PROCEDURE

LEAK AND SPILL PROCEDURES Block any potential routes to water systems. Recover as much of the pure product as possible into appropriate containers. Use absorbent to collect spills or leak residue. Follow all local, state and federal regulations.
WASTE DISPOSAL Dispose of according to federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION None Needed for Normal Use
VENTILATION Not Required for Normal Use
PROTECTIVE GLOVES Rubber or other impervious materials.
EYE PROTECTION Chemical splash proof goggles.
OTHER PROTECTIVE EQUIPMENT A safety shower and eye bath should be available. For operations where spills or splashing may occur, use an impervious body covering and boots.
HANDLING PROCEDURES AND EQUIPMENT Keep container closed when not in use.

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS None
DOT SHIPPING NAME Not Regulated
UN NUMBER None
REPORTABLE QUANTITY (RQ) Not Listed

REFERENCES

ZZ1COMBT
HMIS H-1 F-1 R-1
This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of NPDES permit or EPA.
EPA REG# 57787-13