



MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BLUE WAVE ALGAECIDE CONCENTRATE

DATE PREPARED: 4/14/2005

MANUFACTURER NAME: STEPAN COMPANY
MANUFACTURER ADDRESS: 22 WEST FRONTAGE ROAD
NORTHFIELD, IL 60093
MANUFACTURER PHONE: (847) 446-7500

SUPPLIER NAME AND ADDRESS: SUNCOAST CHEMICALS COMPANY
14480 62ND STREET NORTH
CLEARWATER, FL 33760
SUPPLIER PHONE: (727) 531-8913

EMERGENCY PHONE - 24 HOURS:

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	WT. %	OSHA PEL	ACGIH TLV	CAS REGISTRY #
ETHANOL	10%	N/A	N/A	64-17-5
WATER	40%	N/A	N/A	7732-18-5
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDA	49.8%	N/A	N/A	68391-01-5

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

POTENTIAL HEALTH EFFECTS:

- INHALATION: EXPOSURE VIA INHALATION NOT LIKELY. VAPORS OR MIST AT HIGH CONCENTRATIONS MAY IRRITATE THE MUCOUS MEMBRANE IN THE RESPIRATORY TRACT (NOSE, THROAT, LUNGS) CAUSING RUNNY NOSE, SORE THROAT, COUGHING, CHEST DISCOMFORT, SHORTNESS OF BREATH AND REDUCED LUNG FUNCTION.
- EYE CONTACT: THIS PRODUCT MAY BE CORROSIVE TO EYES. EYE CONTACT MAY RESULT IN CORNEAL INJURY.
- SKIN CONTACT: CONTACT WITH LIQUID MAY PRODUCE SEVERE SKIN IRRITATION

INCLUDING REDNESS AND INFLAMMATION. THIS PRODUCT MAY BE HARMFUL IF IT IS ABSORBED THROUGH THE SKIN.

INGESTION: THIS PRODUCT MAY BE HARMFUL IF IT IS SWALLOWED. INGESTION MAY RESULT IN MODERATELY SEVERE BURNS TO MOUTH AND ESOPHAGUS WITH MORE SEVERE BURNS AND DAMAGE TO THE STOMACH.

HEALTH HAZARDS:

HMIS HAZARD CODE: HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 0
NFPA HAZARD CODE: HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 0

SECTION 4. FIRST AID MEASURES

INHALATION: IF SYMPTOMS ARE EXPERIENCED, REMOVE SOURCE OF CONTAMINATION OR MOVE VICTIM TO FRESH AIR. IF SYMPTOMS PERSIST, GET MEDICAL ATTENTION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. SEEK MEDICAL ATTENTION.

EYE CONTACT: IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES, WHILE HOLDING EYELIDS OPEN. SEEK MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT: FOR SKIN CONTACT, FLUSH WITH LARGE AMOUNTS OF WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. IMMEDIATELY TAKE OFF ALL CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE REUSE.

INGESTION: IF THE MATERIAL IS SWALLOWED, GET IMMEDIATE MEDICAL ATTENTION OR ADVICE. NEVER GIVE ANYTHING BY MOUTH TO A VICTIM WHO IS UNCONSCIOUS OR HAVING CONVULSIONS. IF VOMITING OCCURS NATURALLY, HAVE VICTIM LEAN FORWARD TO REDUCE RISK OF ASPIRATION. DO NOT INDUCE VOMITING.

NOTE TO PHYSICIAN: IF THE PRODUCT IS INGESTED, PROBABLY MUCOSAL DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE. TREAT THE AFFECTED PERSON APPROPRIATELY.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT: (38.9° C) 102° F PMCC

FIRE AND EXPLOSION HAZARDS:
PRODUCT CONTAINS A FLAMMABLE SOLVENT. VAPORS MAY BE RELEASED THAT TRAVEL LONG DISTANCES, IGNITE AND FLASH BACK.

EXTINGUISHING MEDIA:
USE WATER TO COOL FIRE-EXPOSED CONTAINERS AND TO PROTECT PERSONNEL. DRY CHEMICAL, FOAM, CARBON DIOXIDE OR WATER FOG.

FIRE FIGHTING EQUIPMENT/INSTRUCTIONS:
FIREFIGHTERS SHOULD WEAR FULL FIRE-FIGHTING TURN-OUT GEAR (FULL BUNKER GEAR) INCLUDING NIOSH APPROVED SELF-CONTAINED

BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

HAZARDOUS COMBUSTION PRODUCTS:

IRRITATING AND TOXIC GASES OR FUMES MAY BE RELEASED DURING A FIRE.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES:

EMERGENCY ACTION:

ISOLATE SPILL OR LEAK AREA IMMEDIATELY. KEEP UNAUTHORIZED PERSONNEL AWAY. STAY UPWIND. KEEP OUT OF LOW AREAS. VENTILATE CLOSED SPACES BEFORE ENTERING.

WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEANUP. DO NOT TOUCH OR WALK THROUGH SPILLED MATERIAL.

SMALL SPILLS: ABSORB OR COVER WITH DRY EARTH, SAND OR OTHER NON-COMBUSTIBLE MATERIAL AND TRANSFER TO CONTAINERS. USE CLEAN NON-SPARKING TOOLS TO COLLECT ABSORBED MATERIAL.

LARGE SPILLS: DIKE AHEAD OF LIQUID SPILL FOR LATER DISPOSAL.

DO NOT DISCHARGE EFFLUENT CONTAINING THIS PRODUCT INTO LAKES, STREAM, PONDS, ESTUARIES, OCEANS OR OTHER WATERS, INCLUDING SEWER SYSTEMS. FOR GUIDANCE, CONTACT YOU STATE WATER BOARD OR REGIONAL OFFICE OF THE EPA.

SECTION 7. HANDLING AND STORAGE

HANDLING PROCEDURES:

AVOID CONTACT WITH SKIN AND EYES. AVOID BREATHING VAPORS OR MISTS OF THIS PRODUCT. WASH THOROUGHLY AFTER HANDLING. AS WITH ALL CHEMICALS, GOOD INDUSTRIAL HYGIENE PRACTICES SHOULD BE FOLLOWED WHEN HANDLING THIS MATERIAL.

STORAGE PROCEDURES:

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. KEEP THE CONTAINER TIGHTLY CLOSED AND IN A COOL, WELL-VENTILATED PLACE. DO NOT HANDLE OR STORE NEAR AN OPEN FLAME, HEAT OR OTHER SOURCES OF IGNITION. PREVENT ELECTROSTATIC CHARGE BUILDUP BY USING COMMON BONDING AND GROUNDING TECHNIQUES.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS:

PROVIDE ADQUATE LOCAL EXHAUST VENTIALTION TO MAINTAIN WORKER EXPOSURE BELOW EXPOSURE LIMITS. LOCAL EXHAUST IS SUGGESTED FOR USE, WHERE POSSIBLE, IN ENCLOSED OR CONFINED SPACES.

PERSONAL PROTECTIVE EQUIPMENT: EYES/FACE
WEAR CHEMICAL GOGGLES; FACE SHIELD (AS SPASHING IS POSSIBLE)

PROTECTIVE CLOTHING:
WORK CLOTHING SUFFICIENT TO PREVENT ALL SKIN CONTACT SHOULD BE WORN, SUCH AS COVERALLS AND LONG SLEEVES. USE IMPERVIOUS GLOVES.

PERSONAL PROTECTIVE EQUIPMENT: RESPIRATORY
IF EXPOSURE LIMITS ARE EXCEEDED OR IF IRRITATION IS EXPERIENCED, NIOSH APPROVED RESPIRATORY PROTECTION SHOULD BE WORN.

PERSONAL PROTECTIVE EQUIPMENT: GENERAL
EYE WASH FOUNTAIN AND EMERGENCY SHOWERS ARE RECOMMENDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	CLEAR LIQUID
ODOR:	SLIGHT AMINE
FLASH POINT	(38.9 deg C) 102 F PMCC
SPECIFIC GRAVITY:	(0.962 g/ml) 8 lb/bal
PERCENT VOLATILE:	50% (w/w)
VAPOR PRESSURE:	NTO DETERMINED
VAPOR DENSITY:	ESTIMATED HEAVIER THAN AIR
VISCOSITY:	50 cps @ 25 C
EVAPORATION RATE:	ESTIMATED SLOWER THAN ETHYL ETHER
RVOC:	10% (ETHANOL)
pH VALUE:	7.5 – 8.5 @ 10% AQUEOUS SOLUTION

SECTION 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE UNDER NORMAL CONDITIONS.

CONDITIONS TO AVOID: KEEP AWAY FROM HEAT, IGNITION SOURCES AND INCOMPATIBLE MATERIALS.

INCOMPATIBLE MATERIALS: THIS PRODUCT MAY REACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION: UPON DECOMPOSITION, THIS PRODUCT MAY YIELD OXIDES OF NITROGEN AND AMMONIA, CARBON DIOXIDE, CARBON MONOXIDE AND OTHER LOW MOLECULAR WEIGHT HYDROCARBONS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY: NOT LISTED AS A CARCINOGEN

SECTION 12. ECOLOGICAL INFORMATION

VERY TOXIC TO AQUATIC ORGANISMS. PRODUCT IS BIODEGRADABLE.

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSE OF IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION 14. TRANSPORT INFORMATION

DOT (Department Of Transportation)

PROPER SHIPPING NAME:	DISINFECTANTS, LIQUID, CORROSIVE, N.O.S.
UN/NA NUMBER:	UN1903
HAZARD CLASS:	8
PACKING GROUP:	II

SECTION 15. REGULATORY INFORMATION

NONE

SECTION 16. OTHER INFORMATION

NONE

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