

MATERIAL SAFETY DATA SHEET

MSDS

Belclene® 400

Date-Issued: 12/16/2004
MSDS Ref. No: BWA79080
Date-Revised: 01/27/2005
Revision No: New MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Belclene® 400
GENERAL USE: Scale/deposit control additive

MANUFACTURER

Bio-Lab, Inc.
 BioLab Water Additives Division
 P.O. Box 300002
 Lawrenceville, GA 30049-1002
Customer SERVICE: (800) 600-4523
 See Manufacturer for Supplier Information.

24 HR. EMERGENCY TELEPHONE NUMBERS

Poison Control Center (Medical) : (877) 800 - 5553
CANUTEC (Canadian Transportation) : (613) 996 - 6666
CHEMTREC (US Transportation) : (800) 424 - 9300

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS#</u>	<u>Wt.%</u>
Acrylic acid, telomer with sodium 2-acrylamido-2-methyl-1-propanesulfonate and sodium phosphinate	110224-99-2	47 - 53

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

PHYSICAL APPEARANCE: Clear, colorless liquid.

IMMEDIATE CONCERNS: CAUTION: Causes mild eye and skin irritation. Mist may be irritating to eyes, skin, nose throat and lungs. Wear safety glasses and chemical resistant gloves when handling this product. Avoid contact with eyes, skin or clothing.

POTENTIAL HEALTH EFFECTS

EYES: Causes mild eye irritation. Avoid contact with eyes.

SKIN: Causes mild skin irritation. Avoid contact with skin.

INGESTION: No adverse health effects anticipated from ingestion of incidental amounts of product.

INHALATION: May cause respiratory tract irritation.

CHRONIC: There are no known chronic hazards.

ROUTES OF ENTRY: Skin Contact, Inhalation, Ingestion, Eye Contact.

4. FIRST AID MEASURES

EYES: If contact with eyes occurs: Immediately flush with plenty of water. Get medical attention if irritation occurs and persists.

SKIN: If on skin: Wash with plenty of soap and water. Get medical attention if irritation develops, and persists.

INGESTION: If swallowed: Drink plenty of water. Never give anything by mouth to an unconscious person. If any discomfort persists, obtain medical attention.

INHALATION: If inhaled: Remove to fresh air. If breathing is difficult or discomfort occurs and persists, obtain medical attention.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Applicable (aqueous solution)

GENERAL HAZARD: Decomposition and combustion may be toxic.

EXTINGUISHING MEDIA: Appropriate to surrounding materials.

HAZARDOUS COMBUSTION PRODUCTS: Combustion products may include, but are not limited to, carbon monoxide, carbon dioxide, phosphorus, sulfur and nitrogen oxides, as well as other toxic materials.

EXPLOSION HAZARDS: Not considered to be an explosion hazard.

FIRE FIGHTING PROCEDURES: Flood with copious amounts of water.

FIRE FIGHTING EQUIPMENT: Firefighters should wear full protective clothing and self contained breathing apparatus (SCBA). Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

HAZARDOUS DECOMPOSITION PRODUCTS: Burning will generate toxic decomposition products, including carbon monoxide, carbon dioxide and phosphorus, sulfur and nitrogen oxides.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Isolate spill area. Utilizing appropriate clothing and safety equipment, contain spill material. Cover the liquid with an inert absorbent. Using clean, dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry plastic containers for disposal. To decontaminate spill area, tools and equipment, wash with water and add to drums of waste already collected. Dispose of according to local, municipality, state, provincial and federal regulations.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin or clothing. Avoid breathing mists or vapors.

HANDLING: Use safe chemical handling procedures for the hazards presented by this material. Do not mix with other chemicals.

STORAGE: Keep this product in original closed container, in upright position, when not in use. Protect from physical damage. Do not contaminate water, food or feed by storage or disposal. Store in an area inaccessible to children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: General room ventilation plus local exhaust should be used to minimize exposure to mists or vapors.

PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE: Use of safety glasses with side shields is recommended.

SKIN: Wear solvent resistant gloves when handling this product. Avoid contact with skin.

RESPIRATORY: Avoid inhaling vapors or mist. In case of insufficient ventilation, wear an approved NIOSH respirator.

PROTECTIVE CLOTHING: If product gets on clothing, remove and wash before reuse.

WORK HYGIENIC PRACTICES: Wash hands thoroughly with soap and water after handling.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Slight

APPEARANCE: Clear

COLOR: Colorless

pH: 2 to 3

PERCENT VOLATILE: Not Established

VAPOR PRESSURE: 24 mmHg @ 25C (water)

VAPOR DENSITY: Equivalent to water (Air=1)

BOILING POINT: 103°C to 105°C
FREEZING POINT: -3°C to -12°C
MELTING POINT: Not Applicable
SOLUBILITY IN WATER: Miscible @ 25C (% by wt)
EVAPORATION RATE: Equal to water
DENSITY: Not Available
SPECIFIC GRAVITY: 1.23 (water=1)
COEFF. OIL/WATER: less than 0
ODOR THRESHOLD: Not Established
OXIDIZING PROPERTIES: Not Available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Alkaline materials, acid reactive salts such as nitrites and sulphites.

STABILITY: This product is stable under normal conditions.

POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition and burning may produce carbon monoxide, carbon dioxide and phosphorus, sulfur and nitrogen oxides, as well as other potentially toxic materials.

INCOMPATIBLE MATERIALS: Alkaline materials, acid reactive salts such as nitrites and sulphites, mild steel.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: Slight irritant (rabbit)

DERMAL LD₅₀: >2000 g/kg of body weight in rabbits.

Slight irritant (rabbit); Non-sensitizer (guinea pig)

ORAL LD₅₀: >5000 mg/kg of body weight in rats

INHALATION LC₅₀: No data available for this product.

ACUTE EFFECTS FROM OVEREXPOSURE: This product is expected to be slightly irritating to the eyes, and skin. Mist may cause irritation of eyes, nose, throat, and lungs.

EYE EFFECTS: This product is expected to be minimally irritating to eyes.

SKIN EFFECTS: This product is expected to be minimally irritating to skin.

SENSITIZATION: This product is not a skin sensitizer.

CHRONIC / SUBCHRONIC:

No significant adverse health effects expected. Prolonged or repeated eye contact may cause irritation.

CARCINOGENICITY:

This product is not listed as a carcinogen by IARC.

This product is not listed as a carcinogen by NTP.

This product is not listed as a carcinogen by OSHA.

MUTAGENICITY: This product is not expected to be mutagenic.

SYNERGISTIC MATERIALS: None known.

REPRODUCTIVE EFFECTS: Product was not genotoxic in standard tests.

TERATOGENIC EFFECTS: No data available for this product.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

Fish:

Rainbow trout - 96 hr LC50 = 1200 ppm

Bluegill sunfish - 96 hr LC50 > 1000 ppm (active ingredient)

Invertebrates:

Daphnia magna - 48 hr EC50 = 1800 ppm (active ingredient)

Microorganisms:

Algal Inhibition - 72 hr EC50 = 96 ppm (active ingredient)

CHEMICAL FATE INFORMATION:**Effluent Data:**

BOD: Not biodegradable

Aerobic Sewage OECD Coupled Unit Test: biological elimination of 2.7%; thus not inherently biodegradable.

13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: Open dumping or burning of this material is prohibited. An acceptable method of disposal is to burn in an incinerator in accordance with all local, municipal, state, provincial, or federal regulations. The appropriate regulatory agencies should be contacted prior to disposal.

If product was supplied in a single use container, care should be taken to dispose of the container in a responsible manner in accordance with applicable regulations. Label precautions should be followed for any residual material in container.

Whenever possible, our company encourages recycling of containers.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)**

PROPER SHIPPING NAME: Corrosive Liquid, Acidic, Organic, N.O.S (see notes below)

PRIMARY HAZARD CLASS/DIVISION: 8 (Corrosive)

UN/NA NUMBER: 3265

PACKING GROUP: III

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Corrosive Liquid, Acidic, Organic, N.O.S (see notes below)

PRIMARY HAZARD CLASS/DIVISION: 8 (Corrosive)

UN/NA NUMBER: 3265

PACKING GROUP: III

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Corrosive Liquid, Acidic, Organic, N.O.S (see notes below)

PRIMARY HAZARD CLASS/DIVISION: 8 (Corrosive)

UN/NA NUMBER: 3265

PACKING GROUP: III

INTERNATIONAL

PROPER SHIPPING NAME: Corrosive Liquid, Acidic, Organic, N.O.S (see notes below)

PRIMARY HAZARD CLASS/DIVISION: 8 (Corrosive)

UN/NA NUMBER: 3265

PACKING GROUP: III

COMMENTS:

Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S. (contains acrylic acid telomer with sodium 2-acrylamido-2-methyl-1-propanesulfonate with sodium phosphinate)

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: This product or its components are not listed.

FIRE: NO PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: YES CHRONIC: NO

313 REPORTABLE INGREDIENTS: Acrylic acid is a SARA Title III Section 313 Toxic Chemical.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: This product or its components are not listed.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product or its components are not subject to export notification.

TSCA STATUS: This product or its components are listed on the TSCA Inventory.

OSHA HAZARD COMM. RULE: Product is hazardous by definition of the Hazardous Communication Standard.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT): This product is not a US EPA registered pesticide.

CANADA

WHMIS CLASS: D2B - Minimal eye & skin irritant.

DOMESTIC SUBSTANCE LIST (INVENTORY):

The active ingredient in this product is currently in transition from NDSL to DSL.

CALIFORNIA PROPOSITION 65: This product does not contain any substance(s) which are defined by the state of California to cause cancer, birth defects, or other reproductive effects.

COMMENTS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and this MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department

REVISION SUMMARY New MSDS

HMIS RATING

HEALTH:		1
FLAMMABILITY:		0
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:		J

NFPA RATING

HEALTH:	1
FIRE:	0
REACTIVITY:	0

Key

- 4 = Severe
- 3 = Serious
- 2 = Moderate
- 1 = Slight
- 0 = Minimal

HMIS RATINGS NOTES: Protection=J (Safety goggles or glasses, gloves, apron & combination dust & vapor respirator).

COMMENTS: The contents and format of this MSDS are in accordance with OSHA Hazard Communication Standard, National Fire Protection Association (NFPA), Hazardous Materials Identification System (HMIS), and Canada's Workplace Hazardous Information System (WHMIS) and Environmental Protection Agency (CEPA).

MANUFACTURER DISCLAIMER: IMPORTANT: The information is given without a warranty or guarantee. No suggestions for use are intended or shall be construed as a recommendation to infringe any existing patents or violate any Federal, Provincial, State, Municipal, or local laws. Safe handling and use is the responsibility of the customer. Read the label before using this product. This information is true and accurate to the best of our knowledge.