

BUCKMAN LABORATORIES, INC.

MATERIAL SAFETY DATA SHEET



BPL 5040

Diamond Blue Liquid Clarifier

Revision date: 5/5/2004

Phone 1-800-BUCKMAN

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1256 North McLean Boulevard
Memphis, TN 38108

24 Hour Emergency Phone: (901) 767-2722

SECTION 1

OSHA HAZARD CLASSIFICATIONS

Spills produce slippery surfaces. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause skin irritation.

SECTION 2

HAZARDOUS COMPONENTS

Chemical Name

CAS Number

% by Weight

TLV

The components of this product comprise proprietary information.

SECTION 3

FIRST AID INFORMATION

Eye Exposure: 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 Exposure: 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 4

PRIMARY ROUTES OF EXPOSURE

1. Effects from Acute Exposure:

Eye Exposure: Slightly hazardous in case of eye contact (irritant). Non-corrosive to the eyes.

Skin Exposure: Slightly hazardous in case of skin contact (irritant). Non-corrosive for 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.

2. Effects from Chronic Exposure:

NOEL / Oral / Rat / 90 day = 5000 mg/kg. Two year feeding study on rats and dogs did not reveal any adverse health affects.

Not mutagenetic in AMES Test.

Not mutgenetic in micronucleus test on mice.

Not teratogenic, NOEL = 175 mg/kg.

SECTION 5**Toxicological Information****Acute Effects:**

LD50/oral/rat >2000 mg/kg. The product is considered not toxic based on studies on laboratory animals. The product is not expected to be toxic by inhalation.

Irritant / Sensitization Effects:

Slightly hazardous in case of eye contact (irritant). Non-corrosive to the eyes.

Slightly hazardous in case of skin contact (irritant). Non-corrosive for 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:

Not tested by Buckman Laboratories. Not shown as a carcinogen by OSHA, IARC, or NTP.

Target Organs Effects:

May cause damage to the following organs: upper respiratory tract, skin, eyes.

Other Health Effects:

Testing conducted on rabbits showed minor transient irritation which clear within days.

SECTION 6**Environmental Toxicological Information**

LC50 = >10 mg/l 96 hours Danio rerio

LC50 = >10 mg/l 48 hours Daphnia magna

SECTION 7**Physical and Chemical Properties**

Appearance	Amber liquid
Odor	Slight
Density	1.07 g/cm ³ at 25°C (77°F)
Flash Point	CLOSED CUP: >100°C (212°F). (Pensky-Martens.)
Melting/Freezing Point	Not available.
Boiling Point	Not available.
Solubility	Easily soluble in cold water. Easily soluble in hot water.
pH (Neat)	5 to 8
pH (100 ppm in water)	Not available.
Vapor Pressure	Not available.
o/w Partition Coefficient	Not available.
Oxidizing/Reducing Properties .	Not available.
Viscosity	Dynamic: 1000 to 3000 cP
Additional pH Information	Not available.

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

SECTION 8***Fire and Explosion Information***

Flammable Limits	Not available.
Extinguishing Media	Water fog, carbon dioxide, foam, dry chemical.
Special Firefighting Procedures	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 9***Reactivity Information***

Stability	Stable under normal conditions of use and storage. Keep away from heat and source of ignition. Keep in cool, dry place (0C - 35C). Freezing will affect the physical condition and may damage the material.
Incompatibility	Strong oxidizing agents may cause exothermic reaction.
Hazardous Decomposition Products	Hydrogen chloride gas, nitrogen oxides, carbon oxides.

SECTION 10***Handling Precautions***

Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists. In case of insufficient ventilation wear suitable respiratory equipment. Rubber gloves, safety glasses with side shields. Do not wear contact lenses. Chemical resistant apron or protective suit if splashing or contact with solution is likely. Wash hands before breaks and end of workday. Handle in accordance with good industrial hygiene and safety practice. When using do not smoke. Do not breathe vapours or spray mist.

SECTION 11***Satisfactory Materials of Construction***

Not available.

SECTION 12***Spill, Leak, and Disposal Procedures*****SPILL AND LEAK RESPONSE GUIDELINES:**

Important: Before responding to a spill or leak of this product, review each section of this MSDS. Follow the recommendations given in the Handling Precautions sections. Check the Fire and Explosion Data section 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. If irritating fumes are present, consider evacuation of enclosed areas.

Emergency Response Assistance: Emergency technical assistance is available at any time from Buckman Laboratories, Inc., by calling (901) 767-2722.

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. Buckman Laboratories, Inc. can be contacted for technical assistance. Determine if federal, state, and/or local release notification is required (see Regulatory Classifications section of this MSDS). 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 can not 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.

DISPOSAL GUIDELINES

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

Neat Product: Contact your Buckman representative or Buckman Laboratories, Inc., at (901) 278-0330.

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.

Non-proprietary hazardous chemicals are listed in Section 2 of this MSDS. Should you require further information on specific proprietary or inert ingredients please contact Buckman Laboratories' Regulatory Affairs Department.

The information on this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under the recommended conditions of use. Any use of this product or method of application which is not described in the Data Sheet is the responsibility of the user. This Material Data Safety Sheet was prepared to comply with the OSHA Hazard Communication regulations.

Buckman Laboratories, Inc. warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. Buyer assumes the risk of any use contrary to such directions.

Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including **NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE**. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty.

The exclusive remedy against seller shall be in a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of warranty or tort.

Any controversy or claim arising out or relating to this contract, or breach thereof, shall be settle by arbitration in accordance with the commercial arbitration rules of the American Arbitration Association, and judgement upon the rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.