BUCKMAN LABORATORIES, INC. MATERIAL SAFETY DATA SHEET



BUSAN 115

Revision date: 11/3/2006

Buckman Laboratories, Inc. 1256 North McLean Boulevard Phone 1-800-BUCKMAN

24 Hour Emergency Phone: (901) 767-2722

Memphis, TN 38108

SECTION 1

OSHA HAZARD CLASSIFICATIONS

Expected to be corrosive to eyes and skin. Sensitizer Avoid breathing vapors or spray mists.

SECTION 2	HAZARDOUS COMPONENTS		
Chemical Name	<u>CAS Number</u>	% by Weight	<u>TLV</u>
Sodium dodecylbenzene sulfonate	25155-30-0	>1	Not available.
2-Butoxyethanol	111-76-2	3	OSHA PEL Z2 (United
	·		States).
•	•		TWA: 50 ppm
			TWA: 240 mg/m ³
		-	ACGIH TLV (United
			States).
		•	TWA: 20 ppm
		•	TWA: 97 mg/m ³

Buckman Laboratories reports the component(s) listed above as known OSHA hazardous material(s) contained in this product.

SECTION	~
SHALL DIST	-4

FIRST AID INFORMATION

<u>Eve</u> 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.

<u>Skin</u> 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 semicomatose, 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:

7*ye*

Very hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is

Exposure: characterized by redness, watering, and itching.

<u>Skin</u>

Very hazardous in case of skin contact (Sensitizer). Hazardous in case of skin contact

Exposure:

(corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by

itching, scaling, reddening, or, occasionally, blistering.

Inhalation:

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:

Repeated dermal exposures may cause allergic contact dermatitis type reactions in susceptible individuals. Repeated exposures may affect liver, kidney and cardiovascular system.

SECTION 5

Toxicological Information

Acute Effects:

Acute

Oral

(LD50) = >5000 mg/kg Rat

Acute

Dermal

(LD50) = >2000 mg/kg Rabbit

Irritant / Sensitization Effects:

Very hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is characterized by redness, watering, and itching.

Very hazardous in case of skin contact (Sensitizer). Hazardous in case of skin contact (corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

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:

Repeated/prolonged exposure may cause allergic skin reactions. 2-Butoxyethanol can affect the liver and kidneys after repeated exposures. It can have an anaesthetic effect. Birth defects are unlikely animal tests on the active ingredient were negative. Chronic feeding studies did not reveal any significant adverse effects.

SECTION 6

Environmental Toxicological Information

LC50 = 0.32 mg/l 48 hours Daphnia magna

LC50 = 0.18 mg/l 96 hours Bluegill sunfish

LC50 = 0.05 mg/l 96 hours Rainbow trout

I C50 = 0.16 mg/196 hours Sheepshead minnow

.50 = 0.07 mg/l 96 hours Mysid shrimp

SECTION 7	Physical and Chemical Properties
Appearance	Pale yellow liquid
Odor	· Mild.
L _asity	1.01 g/cm3 at 25°C (77°F)
Flash Point	CLOSED CUP: >99°C (210.2°F). (Setaflash.)
Melting/Freezing Point	Not available.
Boiling Point	The lowest known value is 171.2°C (340.2°F) (2-Butoxyethanol).
Solubility	Soluble in cold water. Soluble in hot water.
pH (Neat)	3 [Acidic.]
pH (100 ppm in water)	Not available.
Vapor Pressure	0.27 mm of Hg (@ 20°C)
o/w Partition Coefficient	The product is more soluble in oil; log(oil/water) = 2.5
Oxidizing/Reducing Properties .	Not available.
Viscosity	Not available.
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	
Extinguishing Media	Water fog, carbon dioxide, foam, dry chemical.
ecial Firefighting	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. Store at temperatures between 39 F (4 C) - 100 F (37 C).
ncompatibility(Oxidizing and reducing agents, amines, mercaptans. Do not store in vessels or containers made of steel.

SECTION 10

Hazardous Decomposition

Products

Handling Precautions

Oxides of carbon, sulfur, and nitrogen.

Provide dilution ventilation to control vapor and/or mist level.

When misting may occur in the work area, a NIOSH/MSHA approved respirator may be required. Use a respirator approved for the material and level of exposure. A comprehensive respiratory protection program is needed when respirators must be used.

Eye wash fountains in the work place are STRONGLY recommended.

Chemical resistant gloves, indirect ventilation goggles, body-protective clothing, and chemical resistant safety shoes are required.

SECTION 11

Satisfactory Materials of Construction

Polypropylene

Teflon

√iton

Polyethylene - high density

Kalrez

Vinylester coating

NOTE: With respect to all other materials not listed above, user should be aware that use of such materials with this product may be hazardous and result in damages to such materials and other property and personal

injuries. No data concerning such materials not listed above should be implied by the user.

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 minate 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.

Container Disposal: Empty containers, as defined by appropriate sections of the RCRA, are not RCRA hazardous wastes. However, insure proper management of any residuals remaining in container.

DOT Shipping Information:

UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (2 N-octyl-4-isothiazolin-3-one), Class 8, P.G. III, (ERG Guide 153)

IMO/IMDG Shipping Information:

UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (2-N-octyl-4-isothiazolin-3-one), Class 8, P.G. III, MARINE POLLUTANT, (EmS No. F-A, S-B, ERG Guide 153, HazMat Code 4931466)

IATA Shipping Information:

UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (2 N-octyl-4-isothiazolin-3-one), Class 8, P.G. III, (ERG Guide 153, ERG Code 8L)

When shipped in a single package containing MORE THAN 2,966 GAL (25,000 LBS), this product contains a reportable quantity of SODIUM DODECYLBENZENE SULFONATE. The shipping description should be preceded or followed by the letters "RQ" and "SODIUM DODECYLBENZENE SULFONATE" should be added to the technical names following the proper shipping name.

Unless otherwise stated, the shipping information provided above applies only to non-bulk containers of this product. Proper shipping name and general shipping information may vary depending on packaging and mode of shipment. All products shipped from Buckman locations have been properly packaged and labeled according to appropriate hazardous materials shipping regulations. If any alteration of packaging, product, or mode of transportation is further intended, different shipping information, including but not limited to proper shipping name, RQ designation, and labeling may apply. For further information pertaining to the shipping requirements for this product, contact Buckman's Transportation Department or DOT Coordinator.

SECTION 14

Regulatory Information

And following Regulations are known to apply to the use and disposal of this product. Additional Federal, State and Local regulations may also be applicable.

SARA (Superfund Amendments and Reauthorization Act)

SARA 302 Extremely Hazardous Substances List ...

No components of this product are listed.

SARA 312 Hazard Category ...

No components of this product are listed.

SARA 313 Toxic Chemicals List ...

2-Butoxyethanol (as glycol ether)

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

Sodium dodecylbenzene sulfonate

RQ = 1000 lbs.

RCRA (Resource Conversation and Recovery Act) Listed Hazardous Waste

No components of this product are listed.

CWA (Clean Water Act) Listed Substances

No components of this product are listed.

FDA (Food and Drug Administration)

This product is <u>not approved</u> for food contact uses.

TSCA (Toxic Substances Control Act) Applicability

All components are listed on the TSCA Inventory. Registered pesticides are exempt from the requirements of TSCA.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)

This product is a registered pesticide. EPA Reg. No. 707-236-1448

State Regulations

Various State Right To Know Acts ...

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. While some components are claimed Trade Secret under OSHA Hazard Communication regulations, all known OSHA hazards associated with the Trade Secret component(s), if contained in this product, are fully disclosed.

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.