BUCKMAN LABORATORIES, INC.

Material Safety Data Sheet

Buckman

BULAB 3825

Revision date: 12/4/2009

Buckman Laboratories, Inc. 1256 North McLean Boulevard Memphis, TN 38108

24 Hour Emergency Phone

(901) 767-2722

Phone 1-800-282-5626

SECTION 1

OSHA HAZARD CLASSIFICATIONS

Corrosive to eyes and skin.

SECTION 2	HAZARDOUS COMP	ONENTS		
<u>Chemical Na</u>	<u>me</u>	CAS Number	<u>% by Weight</u>	<u>TLV</u>
Molybdenun	n (soluble compounds, as Mo)		<8	ACGIH (United States). TWA: 5 mg/m ³ OSHA (United States). TWA: 5 mg/m ³
Sodium tetraborate		1330-43-4	3	ACGIH (United States). TWA: 2 mg/m ³ ACGIH (United States). STEL: 6 mg/m ³
Hexanoic ac	id, 6,6',6''-(1,3,5-triazine-2,4,6-triyltriimino)tris-		1	Not available.
	some substances are claimed as trade secret in accordant n hazards are clearly communicated within this document		n of OSHA 29 CF	R 1910.1200(i), all
SECTION 3	FIRST AID INFORM	ATION		
<u>Eye</u> Exposure:	Flush immediately with copious amounts of minutes). Take exposed individual to a heal for further evaluation.			
<u>Skin</u> Exposure:				
<u>Inhalation:</u>	If exposure by inhalation is suspected, imme individual experiences nausea, headache, diz seek a health care professional immediately.			
<u>Ingestion:</u>	DO NOT INDUCE VOMITING. Rinse with the esophagus and dilute stomach contents b milk. Avoid giving alcohol or alcohol related comatose, comatose or convulsing, DO NOT ingestion of the product seek medical assista	y slowly giving o products. In ca GIVE FLUIDS	one (1) to two (ses where the i BY MOUTH.	2) glasses of water or ndividual is semi- In case of intentional

facility.

PRIMARY ROUTES OF EXPOSURE

1. Effects from Acute Exposure:

<u>Eye</u> Exposure:	Very hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is characterized by redness, watering and itching.
<u>Skin</u> Exposure:	Sensitizing properties of the product: Not available. Hazardous in case of skin contact (corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.
<u>Inhalation:</u>	May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.
Ingestion:	Ingestion is not expected to be a primary route of exposure.

2. Effects from Chronic Exposure:

The effects from chronic exposure to this product have not been evaluated.

SECTION 5	Toxicological Information	

Acute Effects:

Not tested.

Irritant / Sensitization Effects:

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

Sensitizing properties of the product: Not available.

Hazardous in case of skin contact (corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering. May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.

Target Organs Effects:

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

Other Health Effects:

None known.

SECTION 6	Environmental Toxicological Information	
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No information available.

SECTION 7	Physical and Chemical Properties
Appearance	Pale yellow liquid
Odor	Sweet organic
Density	1.075 to 1.125 g/cm³
Flash Point	Does not burn.
Melting/Freezing Point	-5°C (23°F)
Boiling Point	>100°C (212°F)
Solubility	Soluble in cold water. Soluble in hot water.
<i>pH</i> (<i>Neat</i>)	11.5 to 13.5 [Basic.]

pH (100 ppm in water)	Not available.
Vapor Pressure	Not available.
o/w Partition Coefficient	Not available.
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	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. Do not expose to extreme temperatures.
Incompatibility	strong acids, strong bases, strong oxidizers
Hazardous Decomposition Products	Oxides of carbon, sodium, and nitrogen.

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Provide exhaust ventilation or other engineering controls to keep the airborne concentrations below established levels or to control vapor and/or mist level. When established limits are exceeded or 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. Use chemical resistant gloves, indirect ventilation goggles, body-protective clothing, and chemical resistant safety shoes. When splashing can occur, a neoprene apron or neoprene rain suit and a face shield are advisable. Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of this product.

The handling precautions for this product are based on the characteristics of the neat product unless otherwise specified.

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 affected areas.

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

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 Information 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.

DISPOSAL GUIDELINES

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

Neat Product: Contact your Buckman representative.

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.

Container Disposal: If assistance is needed, contact your Buckman sales representative.

SECTION 13 Transportation and Shipping Information	
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DOT Shipping Information:

UN1719, CAUSTIC ALKALI LIQUID, N.O.S., (Sodium Hydroxide, Sodium Tolyltriazole), Class 8, P.G. III, (ERG Guide 154)

IMO/IMDG Shipping Information:

UN1719, CAUSTIC ALKALI LIQUID, N.O.S., (Sodium Hydroxide, Sodium Tolyltriazole), Class 8, P.G. III, (EmS No. F-A, S-B, ERG Guide 154, HazMat Code 4935220)

IATA Shipping Information:

UN1719, CAUSTIC ALKALI LIQUID, N.O.S., (Sodium Hydroxide, Sodium Tolyltriazole), Class 8, P.G. III, (ERG Guide 154, ERG Code 8L)

DOT ''RQ'': NONE (Material does not meet concentration requirements for hazardous substances as defined in 49 CFR 171.8)

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

The 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 ...

Immediate (Acute) Health Hazard

SARA 313 Toxic Chemicals List ...

No components of this product are present above the *de minimus* levels.

<u>CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)</u> No components of this product are present above the *de minimus* levels.

<u>RCRA (Resource Conversation and Recovery Act) Listed Hazardous Waste</u> When disposed of, this product may be regulated as a RCRA Hazardous Waste with the

characteristics of corrosivity due to the pH of the neat material.

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CWA (Clean Water Act) Listed Substances
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No components of this product are listed.

FDA (Food and Drug Administration)

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

<u>TSCA (Toxic Substances Control Act) Applicability</u> All components are listed on the TSCA Inventory.

TSCA Section 12(b) Export Notification

This product contains the following chemical(s) subject to TSCA Section 12(b) Export Notification: Hexanoic acid, 6,6',6''-(1,3,5-triazine-2,4,6-triyltriimino)tris-

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)

This product is not a registered pesticide.

HMIS/NPCA Rating ... Health 3 Flammability 0 Reactivity 0

<u>NFPA Ratings</u>...... Health 3 Flammability 0 Reactivity 0

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.