Buckman

SAFETY DATA SHEET

BUSAN 94

BUSAN is a registered trademark.

Section 1. Identification	
GHS product identifier	: BUSAN 94
Other means of identification	: Biocides
Product type	: Liquid.
Relevant identified uses of t	the substance or mixture and uses advised against
See label and/or technical data	a sheet, if available.
Supplier's details	: Buckman Laboratories, Inc. 1256 North McLean Boulevard Memphis, TN 38108 Phone 1-800-282-5626
Emergency telephone number (with hours of operation)	: 24 Hour Emergency Phone 1-800-424-9300
Section 2. Hazard	s identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
GHS label elements Hazard pictograms	
Signal word	: Danger

: Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause drowsiness or dizziness.

Precautionary statements Prevention

Hazard statements

Wear protective gloves. Wear eye or face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Section 2. Hazards identification

Response	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Store locked up.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Biocides
identification	

Product code : BSN94

Ingredient name	%	CAS number
Glycol solvent	Proprietary	-
2,2-Dibromo-3-nitrilopropionamide	20	10222-01-2
Dibromoacetonitrile	<0.5	3252-43-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

While some substances are claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.1200(i), all known hazards are clearly communicated within this document.

Per Appendix D 1910.1200 OSHA, ranges can be used when there is batch-to-batch variability in a mixture or a trade secret claim.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.
Inhalation	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin contact	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Ingestion	 Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water, if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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Section 4. First aid measures

Notes to physician

: Probable mucosal damage may contraindicate the use of gastric lavage.

See toxicological information (Section 11)

Section 5. Fire-fighting measures **Extinguishing media** Suitable extinguishing : Use an extinguishing agent suitable for the surrounding fire. media Unsuitable extinguishing : Do not use water jet. media Specific hazards arising : In a fire or if heated, a pressure increase will occur and the container may burst. from the chemical Hazardous thermal : Decomposition products may include the following materials: carbon dioxide decomposition products carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides **Special protective actions** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable for fire-fighters training. **Special protective** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. equipment for fire-fighters Remark Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. If product becomes contaminated with water, monitor product for heat generation and/or decomposition. Fight fire from protected location of safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this SDS. Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections. Remark This material will not burn until the water has evaporated. Residue can burn. Container may rupture from gas generation in a fire situation.

Section 6. Accidental release measures

Personal precautions, protec	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ntainment and cleaning up
Small spill	: Contain spilled material if possible. Attempt to neutralize by adding materials such as Sodium bisuphite or Sodium metabisulfite. Neutralize with approximately 17.2 grams sodium bisulfilte (NaHSO3) or 15.7 grams sodium metabisulfite (Na2S2O5) for every 100 grams biocidal product. Absorb with materials such as: Dirt, Sand, Vermiculite, Zorb-all, Hazorb. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.
Large spill	: Contain spilled material if possible. Attempt to neutralize by adding materials such as Sodium bisuphite or Sodium metabisulfite. Neutralize with approximately 17.2 grams sodium bisulfilte (NaHSO3) or 15.7 grams sodium metabisulfite (Na2S2O5) for every 100 grams biocidal product. Absorb with materials such as: Dirt, Sand, Vermiculite, Zorb-all, Hazorb. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

Section 7. Handling and storage

Precautions for safe handling		
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Do not store above the following temperature: 70°C (158°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 7. Handling and storage

Satisfactory Materials of	: ABS (Plastic), discolors, 0.9% weight loss
Construction	Amercoat 23
	Butyl rubber
	Buna-N rubber
	Dow Silastic Tubing, discolors and clouds
	Fiberglass-Reinforced Plastic (FRP), with some resins, check
	PVC - flexible, discolors
	Hastelloy C-276
	Heresite P-403
	Kynar
	6/6 Nylon, 1.9% weight gain
	Plasite 4005
	Polyethylene, all polyethylenes are ok
	Polypropylene, discolors
	Rehau Tube, discolors
	PVC - rigid
	Teflon
	Titanium
	Tygon R3603, clouds
	Viton®
	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. Do not store in: Aluminum,
	Brass, Copper, Copper alloys, Mild Steel, Stainless Steel.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Glycol solvent	TWA (aerosol): 10 mg/m3
2,2-Dibromo-3-nitrilopropionamide	2 mg/m3
Dibromoacetonitrile	0.1 ppm
	Absorbed via skin
Sodium bromide	TWA 6 mg/m3

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measured	ires
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

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Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Colorless to brown
Odor	: Odorless to mild.
Odor threshold	: Not available.
рН	: 1.5 to 5
Melting point	: <-50°C (<-58°F)
Boiling point	: Decomposition temperature: >70°C (>158°F)
Flash point	: Closed cup: 100°C (212°F) Open cup: >182°C (>359.6°F) [Cleveland.]
Evaporation rate	: Not available.
Flammability (solid, gas)	 Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. If product becomes contaminated with water, monitor product for heat generation and/or decomposition. Fight fire from protected location of safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this SDS. Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.
Date of issue/Date of revision	: 10/30/2017 Date of previous issue : 10/28/2017 Version : 0.21 6/14

Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	:	LFL: Not determined UFL: Not determined
Vapor pressure	:	2.5 kPa (18.9 mm Hg) [room temperature]
Vapor density	:	<1 [Air = 1]
Relative density	:	1.2 to 1.3
Dispersibility properties	:	Not available.
Solubility	:	Partially soluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	>70°C (>158°F)
Viscosity	:	Dynamic: 20 cP Kinematic: 16 cSt
VOC	:	7 % (w/w) [Method 24]

Aerosol product

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid temperatures above 70°C/158°F.
Incompatible materials	: Avoid contact with oxidizers, strong bases, metals such as aluminum.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Ac	ute	tox	icity

Product/ingredient name	Result	Species	Dose	Exposure
Dibromoacetonitrile BUSAN 94	LD50 Oral LC50 Inhalation Dusts and mists LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Rat Rat Rat Rabbit Rat	245 mg/kg 1.25 mg/l 1.4 mg/l >2000 mg/kg 510 mg/kg	- 4 hours 4 hours - -
Conclusion/Summary : Low acute oral toxicity. Swallowing may result in irritation or burns of the mouth, throat, and gastrointestinal tract. May cause dizziness and drowsiness.				

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Glycol solvent	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
2,2-Dibromo- 3-nitrilopropionamide	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Severe irritant	Rabbit	-	500 milligrams	-

Sensitization

Not available.

Conclusion/Summary

Skin

: The results of testing (skin) on guinea pigs showed this material to be sensitizing. Did not cause allergic skin reactions when tested in humans.

Mutagenicity

Not available.

Conclusion/Summary : For the active ingredient(s): In vitro genetic toxicity studies were negative. For the major component(s): Animal genetic toxicity studies were negative.

Carcinogenicity

This product has not been tested unless noted in summary results.

Conclusion/Summary : Active ingredient did not cause cancer in laboratory animals. There is evidence that dibromoacetonitrile (DBAN) (IARC 2B), a possible degradation product of 2, 2-dibromo-3-nitrilopropionamide (DBNPA), can produce cancer in laboratory animals. However, the relevance of this to humans is unknown.

Classification

Product/ingredient name	OSHA	IARC	NTP
Dibromoacetonitrile	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Conclusion/Summary

For the active ingredient(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
BUSAN 94	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure	: Routes of entry anticipated: Dermal, Inhalation. Routes of entry not anticipated: Oral.
Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Causes severe burns. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed. Can cause central nervous system (CNS) depression.
Symptoms related to the p	physical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness

	Tedness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	 Adverse symptoms may include the following: stomach pains

<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Excessive exposure may increase the blood and tissue levels of bromine.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
Not available.	
Conclusion/Summary	: CENTRAL NERVOUS SYSTEM – Category 3: May cause drowsiness and dizziness. Excessive exposure may increase the blood and tissue levels of bromine. Observations in animals include kidney effects following repeated ingestion of active ingredient, but r evidence of systemic toxicity following repeated dermal exposure at maximum attainable doses.
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.

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Section 11. Toxicological information

Fertility effects

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
BUSAN 94	Acute EC50 1.5 mg/l	Algae	72 hours
	Acute EC50 2.5 mg/l	Daphnia	48 hours
	Acute LC50 3.6 mg/l	Fish	96 hours

Section 13. Disposal considerations

Disposal metho	ds
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: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	3265	3265	3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2, 2-Dibromo- 3-nitrilopropionamide)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2, 2-Dibromo- 3-nitrilopropionamide)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2, 2-Dibromo- 3-nitrilopropionamide)
Transport hazard class(es)	8 CORROUTE	8	8
Packing group	111	Ш	III
Environmental hazards	No.	No.	No.

Version : 0.21

Section 14. Transport information

Additional	Remarks ERG Guide 153	Emergency schedules F-A, S-	The environmentally hazardous
information		В	substance mark may appear if
		IMDG Code Segregation	required by other transportation
		group 1 - Acids	regulations.
		Remarks ERG Guide 153,	Remarks ERG Guide 153,
		HazMat Code 4931466	ERG Code 8L

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

Potential impurities present in trace quantities are included in the regulatory listings of this section.

U.S. Federal regulations : United States inventory (TSCA 8b): This product is subject to regulation under the US Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and is therefore exempt from US Toxic Substances Control Act (TSCA) Inventory listing requirements.

Clean Water Act (CWA) 307: Cyanide, solid; selenium

SARA 302/304

Composition/information on ingredients

No products were found.

- SARA 304 RQ
 - : Not applicable.
- SARA 311/312
- Classification
- : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Glycol solvent	Proprietary	No.	No.	No.	Yes.	No.
2,2-Dibromo-3-nitrilopropionamide	20	No.	No.	No.	Yes.	No.
Dibromoacetonitrile	<0.5	No.	No.	No.	Yes.	Yes.

<u>SARA 313</u>

Supplier notification2,2-Dibromo-3-nitrilopropionamide10222-01-220		Product name	CAS number	%
	Supplier notification	2,2-Dibromo-3-nitrilopropionamide	10222-01-2	20

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

CERCLA : CERCLA: Hazardous substances.: Cyanide, solid: No RQ is being assigned to the generic or broad class.; selenium: 100 lbs. (45.4 kg);

FDA : This product is <u>allowed</u> under the following FDA (21 CFR) sections :175.105 (Limitation: For use only as a preservative.) 176.170 (Limitation: For use as a preservative at a level not to exceed 500 ppm in coating formulations and in component slurries and emulsions, used in the production of paper and paperboard and coating for paper and paperboard.); 176.300 (Limitation: For use at a maximum level of 0.5 lb/ton dry weight fiber.).

Section 15. Regulatory information

BfR	: Chapter XXXVI
EPA Reg. No.	: 1448-72
FIFRA	: This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non- pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
	DANGER : Corrosive. Causes irreversible eye damage. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes skin burns. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes, on skin, or on clothing. Wear chemical workers' goggles, rubber gloves (such as barrier laminate, butyl rubber, neoprene rubber, nitrile rubber, polyvinyl chloride {PVC and viton}), coveralls worn over long sleeved shirt and long pants, and chemical resistant footwear plus socks when handling. For mixing/loading and for cleaning equipment, wear a chemical resistant apron. Use with adequate ventilation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing separately before reuse.
	ENVIRONMENTAL HAZARDS : This pesticide is toxic to fish and aquatic organisms. Apply this product only as specified on this label. Do not contaminate water by cleaning of equipment, or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.
	CHEMICAL AND PHYSICAL HAZARDS: Reaction with strong reducing agents may be

CHEMICAL AND PHYSICAL HAZARDS: Reaction with strong reducing agents may be explosive. Avoid misting.

State regulations

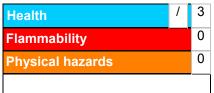
California Prop. 65

WARNING: This product can expose you to chemicals including Dibromoacetonitrile, which is known to the State of California to cause cancer, and Hydrogen cyanide & cyanide salts, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Cancer	Reproductive
No. Yes.	Yes. No.
	No.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



BUSAN 94

Section 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of printing	: 11/3/2017
Date of issue/Date of revision	: 10/30/2017
Date of previous issue	: 10/28/2017
Version	: 0.21
Prepared by	: Buckman Regulatory Affairs
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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 outside of such directions.

Seller makes no other warranty or representation of any kind, express or implied, concerning the product,

Date of issue/Date of revision : 10/30/2017	Date of previous issue	: 10/28/2017	Version	:0.21	13/14
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Section 16. Other information

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 judgment upon the rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

Buckman expressly disclaims responsibility, thus any liability, for the creation, accuracy, or completeness of the labeling and Safety Data Sheet (SDS) required for our customer's product under the Occupational Health and Safety Administration's Hazard Communication Standard, 29 C.F.R. §1910.1200 (2012). While our customers should take all necessary steps to ensure that an appropriate label and SDS is generated for their product and provided to all downstream users in accordance with the Hazard Communication Standard, customers may use information from Buckman's label and SDS for their product as a starting point for developing its own GHS-compliant label and SDS. Customer agrees to indemnify and hold Buckman harmless from any claims, causes of actions, fines, or damages sought by a local, state, or federal government, or agency, including its reasonable attorney fees, should Customer violate any OSHA laws or any other federal or state laws in using or selling this product.