

Section 1. Identification

GHS product identifier : BUSAN 1078

Other means of identification : Biocides

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

See label and/or technical data 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. Hazards 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 : SKIN CORROSION - Category 1B
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 3%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 4%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 4%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid breathing vapor. 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 identification** : Biocides

Product code : BSN1078

Ingredient name	%	CAS number
Magnesium Nitrate	1.4 - 2	10377-60-3
5-Chloro-2-methyl-4-isothiazolin-3-one	1.1 - 1.4	26172-55-4
2-Methyl-4-isothiazolin-3-one	0.3 - 0.5	2682-20-4
Nitric acid, copper(2+) salt (2:1)	0.15 - 0.17	3251-23-8

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.

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 media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : 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 training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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** : 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.

- Satisfactory Materials of Construction** : 304 Stainless steel
316 Stainless steel
PVC - flexible
PVC - rigid
Polyethylene - crosslink
Polyethylene - high density
Polyethylene - low density
Polypropylene
Rehau Tubing
EPDM rubber
Butyl rubber
ABS (Plastic)
Teflon
Tygon F-4040
Tygon tubing R3603
Polyurethane Tubing
Pharmed Tubing
FRP
Norprene
Dow Sillastic Tube
Polycarbonate
Polystyrene
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 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, 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 measures

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.

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

Appearance

Physical state	: Liquid.
Color	: Green to pale yellow
Odor	: Pungent. [Strong]
Odor threshold	: Not available.
pH	: 2.5 to 5
Melting point	: -3°C (26.6°F)

Section 9. Physical and chemical properties

Boiling point	: 100°C (212°F)
Flash point	: Closed cup: >100°C (>212°F) [Pensky-Martens.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: 0.0013 kPa (0.01 mm Hg) [room temperature]
Vapor density	: Not available.
Relative density	: 1.01 to 1.03
Dispersibility properties	: Not available.
Solubility	: Soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): 3 mPa·s (3 cP)
VOC	: 0 % (w/w) [Method 24]

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	: No specific data.
Incompatible materials	: No specific data.
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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Nitric acid, copper(2+) salt (2:1) BUSAN 1078	LD50 Oral	Rat	794 mg/kg	-
	LC50 Inhalation Dusts and mists	Female	>5 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3810 mg/kg	-

Irritation/Corrosion

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Product/ingredient name	Result	Species	Score	Exposure	Observation
Nitric acid, copper(2+) salt (2:1) BUSAN 1078	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Eyes - Severe irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Skin - Severe irritant	Rabbit	-	500 milligrams	-
	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Severe irritant	Rat	-	-	-

Sensitization

Product/ingredient name	Route of exposure	Species	Result
5-Chloro-2-methyl-4-isothiazolin-3-one	skin	Guinea pig	Sensitizing
2-Methyl-4-isothiazolin-3-one	skin	Guinea pig	Sensitizing

Mutagenicity

Not available.

Carcinogenicity

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

Classification

Product/ingredient name	OSHA	IARC	NTP
Magnesium Nitrate	-	2A	-
Nitric acid, copper(2+) salt (2:1)	-	2A	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.
Routes of entry not anticipated: Oral.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes severe burns. May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : The following tests were conducted with the technical grade active ingredient(s):

Ames Salmonella Assay:
Positive (T100) without activation; Negative with activation
Mouse Lymphoma Forward Mutation Assay:
Positive
Rat Bone Marrow Cytogenetics Assay:
Negative, no chromosomal damage
In Vivo Micronucleus Assay in Mice:
Negative
Sex-Linked Recessive Lethal Assay:
Negative

Teratology

Rabbits: Dose levels used were 1.5, 4.4 and 13.3 mg/kg/day. Dose related maternal toxicity was observed. No evidence of a teratogenic response, but evidence of embryotoxicity and fetotoxicity was noted.

Rats: Maternal toxicity was observed at all dose levels. No evidence of a teratogenic response at doses up to 100 mg/kg/day (highest dose tested).

90 Day Subchronic Toxicity

Oral - Rats: There was a dose related increase in adrenal weights in the females. A slight, but significant increase in SGOT was noted in the high dose (800 ppm) males. No other changes were noted.

Oral - Dogs: No treatment related effects were noted at doses up to 1500 ppm (highest dose tested).

Dermal - Rabbits: Dose levels of 100, 200 and 400 ppm active (1 ml/kg) produced dose dependent signs of dermal irritation. No treatment related signs of systemic

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toxicity, or changes in clinical chemistry parameters, or histopathological evaluation.

Inhalation - Rats: Exposed to levels of product at 0, 0.34, 1.15 and 2/64 mg active per cubic meter. There were no treatment related changes in hematology, gross pathology or ophthalmology. Decrease weight gains were noted in the high dose group. Histopathologic effects related to irritation/rhinitis of the nasal cavity was noted in the mid and high dose groups. No treatment related effects were noted in the low dose group.

Metabolism

Oral - Rats: After a dosage of 2.5 mg/kg/day given for 7 days, 90% of the administered C14 was excreted in 3 days; <2% as parent compound.

Dermal - Rats: After a dosage of 0.2 - 1.6 mg/kg, 60% of the administered C14 was remained at the site of administration on the skin; whereas, 20-40% was absorbed systemically. The C14 was excreted in urine.

General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: Did not cause cancer in laboratory animals.
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.
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 1078	Acute IC50 0.16 mg/l	Daphnia	48 hours
	Acute LC50 0.19 mg/l	Fish	96 hours
	Acute LC50 0.28 mg/l	Fish	96 hours
	Acute LC50 0.3 mg/l	Fish	96 hours
	Acute LC50 0.55 mg/l	Fish	96 hours
	Acute LC50 1.9 mg/l	Fish	96 hours

Section 13. Disposal considerations





Disposal methods	: 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.
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Section 13. Disposal considerations

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification : D002, 100 lbs.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	3265	3265	3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (5-Chloro-2-methyl-4-isothiazolin-3-one, 2-Methyl-4-isothiazolin-3-one)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (5-Chloro-2-methyl-4-isothiazolin-3-one, 2-Methyl-4-isothiazolin-3-one). Marine pollutant (5-Chloro-2-methyl-4-isothiazolin-3-one, 2-Methyl-4-isothiazolin-3-one)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (5-Chloro-2-methyl-4-isothiazolin-3-one, 2-Methyl-4-isothiazolin-3-one)
Transport hazard class(es)	8 	8  	8 
Packing group	II	II	II
Environmental hazards	No.	Yes.	No.
Additional information	Remarks ERG Guide 153	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-A, S-B Remarks ERG Guide 153, HazMat 4931466	The environmentally hazardous substance mark may appear if required by other transportation regulations. Remarks ERG Guide 153, 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 to Annex II of MARPOL and the IBC Code : Not available.

Section 15. Regulatory information

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

U.S. Federal regulations : **TSCA 12(b) one-time export:** 5-chloro-2-methyl-2H-isothiazol-3-one

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: copper dinitrate

Clean Water Act (CWA) 311: copper dinitrate

Section 15. Regulatory information

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
Magnesium Nitrate	1.4 - 2	No.	No.	No.	No.	Yes.
5-Chloro-2-methyl-4-isothiazolin-3-one	1.1 - 1.4	No.	No.	No.	Yes.	No.
2-Methyl-4-isothiazolin-3-one	0.3 - 0.5	No.	No.	No.	Yes.	No.
Nitric acid, copper(2+) salt (2:1)	0.15 - 0.17	No.	No.	No.	Yes.	Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Magnesium Nitrate	10377-60-3	1.4 - 2
Supplier notification	Magnesium Nitrate	10377-60-3	1.4 - 2

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.: copper dinitrate: 100 lbs. (45.4 kg);

FDA : This product is allowed under the following FDA (21 CFR) sections :175.105 - Limitation: For use only as an antimicrobial agent in polymer latex emulsions. / 175.300, 175.320 - Limitation: For use only as an antimicrobial agent in emulsion-based silicon coatings at a level not to exceed 50 mg active ingredient/Kg in the coating formulation. / 176.170, 176.180 - Limitations: For use only 1) as an antimicrobial agent for polymer latex emulsions in paper coatings at a level not to exceed 50 ppm active ingredient in the coating formulation and 2) as an antimicrobial agent for finished coatings and for additives used in the manufacture of paper and paperboard including fillers, binders, pigment slurries, and sizing solutions at a level not to exceed 25 ppm active ingredient in the coating formulations and additives. / 176.300 - Limitation: Not to exceed 2.5 pounds per ton of dry weight fiber..

BfR : XXXVI Limitation: Mixture of 5-chloro-2-methyl-4-isothiazolin-3-one (approx. 3 parts) and 2-methyl-4-isothiazolin-3-one (approx. 1 part). No more than 0.5 µg/dm² of the mentioned isothiazolinones in total must be detectable in the extract of the finished product.

EPA Reg. No. : 1448-348

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.

Section 15. Regulatory information

DANGER: Corrosive. Causes eye damage and skin burns. May cause allergic skin reaction. Harmful if inhaled. Harmful if swallowed. Do not get in eyes, on skin, on clothing. Mixers, loaders and others exposed to this product must wear: long-sleeved shirt and long pants; chemical resistant gloves such as nitrile or butyl rubber; shoes plus socks; goggles and face shield; and chemical resistant apron. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists use detergent and hot water. Keep and wash PPE separately from other laundry. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly. This product may cause skin sensitization reactions in some people.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes streams, ponds, estuaries, oceans, or public 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. Do not contaminate water by cleaning of equipment or disposal of waste. Apply this pesticide only as specified on the label.

Section 16. Other information

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

Health	/	3
Flammability		0
Physical hazards		0

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.)



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Section 16. Other information

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.

History

Date of printing	: 9/17/2019
Date of issue/Date of revision	: 9/17/2019
Date of previous issue	: 9/17/2019
Version	: 0.22
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 = Intermediate Bulk Container 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, 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 of or relating to this contract, or breach thereof, shall be settled 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

Section 16. Other information

attorney fees, should Customer violate any OSHA laws or any other federal or state laws in using or selling this product.