MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification
BIOCIDE ONE
Product Code: WBO1A
Chemical Family: Biocide
CAS Number: Blend

Company Identification
Zee Company, Inc.
4146 South Creek Road
Chattanooga, TN. 37406
423-698-1401 (For emergencies)
1-800-424-9300 (CHEMTREC)

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT LISTING:

Chemical Name	Amount	CAS Number
5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	1.15- 1.25 %	26172-55-4
2-METHYL-4-ISOTHIAZOLIN-3-ONE	0.35 - 0.45 %	2682-20-4
MAGNESIUM NITRATE	1.7 - 1.8 %	10377-60-3

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

EXPOSURE GUIDELINES:
No Information Available.

MISCELLANEOUS:
Industry Exposure Limit Recommendation [mg/m3]:

COMPONENT	CAS#	TWA	STEL.
2-Methyl-4-isothiazolin-3-one	(2682-20-4)	1.5	4.5.
5-Chloro-2-methyl-4-isothiazolin	(26172-55-4)	0.076	0.23.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
Corrosive liquid. May cause severe skin irritation. May cause severe eye, nose, throat, and lung irritation or burns.

EYE:
This product is considered to be a primary eye irritant. Causes severe irritation and burns. Danger of very serious irreversible effects.

SKIN:

A single, prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Causes irritation, possible burns on prolonged contact.

INHALATION:
Avoid breathing vapors or mists. Prolonged or excessive inhalation may cause respiratory tract irritation or burns of the mucous membranes.
INGESTION:
Ingestion is not considered a potential route of exposure. Harmful if swallowed. Ingestion can cause irritation of the mouth, throat, and esophagus.

CARCINOGENICITY INFORMATION:
No known cancer hazards.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT FIRST AID:
Remove contaminated clothing and shoes. Wash affected area immediately with large amounts of soap and water. Get medical attention if irritation develops or persists.

INHALATION FIRST AID:
Although this product is not known to cause respiratory problems, if breathing is difficult, remove to fresh air and provide oxygen. If not breathing, give artificial respiration. Get medical attention if cough or other symptoms develop.

INGESTION FIRST AID:
If swallowed, do not induce vomiting. Give water or milk to dilute. Never give anything by mouth to an unconscious person. Contact a physician.

NOTES TO PHYSICIAN:
Probable mucosal damage may contraindictate the use of gastric lavage. All treatments should be based on observed signs and symptoms of distress in the patient. Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
COC Flash Point: N/A
Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR
LEL: N/A
UEL: N/A

EXTINGUISHING MEDIA:
Water, carbon dioxide, foam or dry powder.

FIRE & EXPLOSION HAZARDS:
No known unusual hazards in a fire/explosion situation.

FIRE FIGHTING INSTRUCTIONS:
As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear. Containers can build up pressure if exposed to

heat (fire). Dike and collect water used to fight fire. Contaminated extinguishing water must be disposed of in accordance with applicable regulations.

COMBUSTION PRODUCTS:
Oxides of carbon, nitrogen and sulfur.

6. ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (PERSONNEL):
Wear appropriate personal protective equipment. Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/Personal Protection. Contain liquid to prevent further contamination of soil, surface water or groundwater.

INITIAL CONTAINMENT:
Contain spilled material. Absorb spills with inert material. Transfer to suitable containers for disposal.

LARGE SPILLS PROCEDURE:
Warning. Avoid runoff into storm sewers, municipal sewers, open bodies of water and ditches which lead to waterways. Contain spilled liquid with sand or earth. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.
Deactivate spill area with freshly prepared solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water. Apply solution to the spill area at a ratio of 10 volumes deactivation solution per estimated volume of residual spill. Let stand 30 minutes. Flush the spill area with copious amounts of water to chemical sewer (if in accordance with local procedures, permits and regulations). DO NOT add deactivation solution to waste pail to deactivate the absorbed material.

SMALL SPILLS PROCEDURE:
Clean up area by absorbent material.

7. HANDLING AND STORAGE

RECOMMENDED STORAGE TEMPERATURE
Minimum: 0.0 C (32.0 F)
Maximum: 55.0 C (131.0 F)

HANDLING (PERSONNEL):
Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Avoid contact with skin and eyes. Avoid breathing mists. Wash hands thoroughly after handling.

HANDLING (PHYSICAL ASPECTS):
Corrosive liquid. Store in a secure area. Wash hands thoroughly after handling.

STORAGE PRECAUTIONS:
Do not store this material in containers made of steel. Keep container tightly closed. Avoid extreme temperatures.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:
Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

EYE / FACE PROTECTION REQUIREMENTS:
Chemical goggles are recommended to avoid contact with eyes.

SKIN PROTECTION REQUIREMENTS:
Material is a potential skin sensitizer. Wear protective gloves (Nitrile, Butyl Rubber) to minimize skin contamination. Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation.

RESPIRATORY PROTECTION REQUIREMENTS:
When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Liquid
COLOR: Yellow Green
ODOR: Pungent
BOILING POINT: 212 F @ 760 mm Hg
SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY: 1.02 @ 25 C (77 F) (Water = 1)
PH: 2.2 to 4.2 @ 100 wt/wt%
EVAPORATION RATE: < 1 (Butyl Acetate = 1)
DENSITY: 8.50 lbs/gal

10. STABILITY AND REACTIVITY

STABILITY:
This compound is stable at ambient conditions.
POLYMERIZATION:
Hazardous polymerization will not occur.
INCOMPATIBILITY WITH OTHER MATERIALS:
Avoid contact with strong oxidizing agents, reducing agents, amines and mercaptans.
DECOMPOSITION:
Oxides of carbon, nitrogen and sulfur. Hydrogen chloride.
CONDITIONS TO AVOID:
None known.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:
Eye Irritation - rabbit: Corrosive.
SKIN EFFECTS:
Skin Irritation - rabbit: Corrosive.
ACUTE ORAL EFFECTS:
Acute Oral LD50 (rat): 3310 mg/kg (female) & >5000 mg/kg (male).
CHRONIC EFFECTS /:
Sensitization: Skin sensitizer.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS:
Acute Fish 96 Hr LC50 (rainbow trout): 0.19 mg/L ai.
ENVIRONMENTAL FATE:
Biodegradation (aquatic metabolism):
2-Methyl-4-isothiazolin-3-one (2682-20-4) t 1/2 aerobic = 9.1 hr.
5-Chloro-2-methyl-4-isothiazolin (26172-55-4) t 1/2 aerobic = 17.3 hr.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:
Avoid disposal into waste water treatment facilities. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.
EPA Hazardous Waste: D002 - CORROSIVE.
RCRA RQ: 100 lbs.
CONTAINER DISPOSAL:
Uncleaned empty containers should be disposed of in the same manner as the contents.

14. TRANSPORT INFORMATION

PRODUCT LABEL: BIOCIDE ONE
D.O.T. SHIPPING NAME: Corrosive liquid, acidic, organic, n.o.s., (5-chloro-2-methyl-4-isothiazolin-3- one), 8, UN3265, PGII

MISCELLANEOUS:
The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

15. REGULATORY INFORMATION

SARA 311 Categories:
Immediate (Acute) Health Effects: Yes
Delayed (Chronic) Health Effects: Yes
Fire Hazard: No
Sudden Release Of Pressure Hazard: No
Reactivity Hazard: No

REGULATORY LISTS SEARCHED:
01 = SARA 313 02 = SARA 302/304
03 = ACGIH TWA 04 = ACGIH Calc TLV
05 = CANADIAN WHMIS 06 = CA Proposition 65
07 = CERCLA 302.4 08 = ACGIH STEL
09 = OSHA PEL 10 = OSHA Ceiling

WHMIS Hazard Symbols:
Class D-2(B) - Materials Causing Other Toxic Effects, Class E - Corrosive Material

SARA Title III - Section 313
MAGNESIUM NITRATE (10377-60-3)

MISCELLANEOUS INFORMATION:
This product is subject to regulation under the US Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and is therefore exempt from U.S. Toxic Substance Control Act (TSCA) Inventory listing requirements. This product is subject to regulation under the Canadian Pest Control Products Act (P.C.P. Act). Therefore, this product is excluded from the supplier labeling and material safety data sheet requirements as specified in Section 12 of the Hazardous Products Act.

16. OTHER INFORMATION

PREPARED BY: Jim Faller
APPROVAL DATE: April 28, 2006
MSDS NUMBER: 100123

HMIS Rating:

Health - 3
Flammability - 0
Reactivity - 0

NFPA Rating:
Health - 3
Flammability - 0
Reactivity - 0

REVISION STATEMENT:
Revised information in section(s): 2.

ABBREVIATIONS USED IN THIS MSDS:
TLV - THRESHOLD LIMIT VALUE TWA - Time Weighted Average
STEL - SHORT TERM EXPOSURE LIMIT TPQ - Threshold Planning Quantity
RQ - REPORTABLE QUANTITY PEL - Permissible Exposure Level
C - CEILING LIMIT CAS - Chemical Abstract Service Number
NDA - NO DATA AVAILABLE N/A - Not Applicable or Not Available

MSDS PREPARATORY STATEMENT:
Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by ZEE Company, Inc.
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The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the best opinion on the subject as of the date on this sheet. However, no warranty, guarantee or representation, express or implied, is made by ZEE Company, Inc. as to the correctness or sufficiency of this information or to the results to be obtained from the use thereof.
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END OF MSDS
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