

VALVTECT A DIVISION OF  
 KOP-COAT, INC.  
 3400 DUNDEE ROAD  
 NORTHBROOK  
 IL 60062

EMERGENCIES  
 HEALTH/SPI LLS. . . . .: 800-548-0489  
 CHEMTREC ASSI STANCE: 800-424-9300  
 CHEMTREC OUTSI DE US: 703-527-3887  
 CANUTEC. . . . .: 613-996-6666

VALVTECT A DIVISION OF  
 PRODUCT I NFORMATI ON: 847-272-2278  
 OUTSI DE USA. . . . .: 847-272-2278

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 1 PRODUCT I DENTI FICATI ON  
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PRODUCT NAME: BioGuard ULS  
 PRODUCT USE.: Fuel Addi ti ve - Antimi crobi al agent  
 APPEARANCE.: Yel lowi sh brown li qui d  
 CAS NUMBER.: Mi xt ure  
 SYNONYMS. . . . : None

REVI SI ON. . . : 1  
 DATE. . . . .: 1/09/07  
 MSDS NUMBER: BGDULS201

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 2 HAZARDOUS I NGREDI ENTS  
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HAZARDOUS COMPONENT	REG AGENCY	PPM	NOTES	MG/M3	NOTES
1-Ni tropropane CAS NUMBER: 108-03-2 PERCENT BY WGT: 5 TO 10			(None establ ished.)		
Morphol i ne (ski n) CAS NUMBER: 110-91-8 PERCENT BY WGT: 5 TO 10	ACGI H TWA NI OSH NI OSH-STEL OSHA STEL OSHA TWA	20 20 30 30 20		71 70 105 105 70	
4-4-(2-Ethyl -2-ni trotri - methy l ene di morphol i ne CAS NUMBER: 1854-23-5 PERCENT BY WGT: 1 TO 5			(None establ ished.)		
4-(2-Ni trobutyl )morpho- l i ne CAS NUMBER: 2224-44-4 PERCENT BY WGT: 75 TO 80			(None establ ished.)		
Methy l ene di morphol i ne CAS NUMBER: 5625-90-1			(None establ ished.)		

2 HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	REG AGENCY	PPM	NOTES	MG/M3	NOTES
PERCENT BY WGT:	5 TO 10				

3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! CORROSIVE. Harmful or fatal if swallowed, can enter lungs and cause damage. Can cause skin and eye burns. Combustible liquid/vapor.

EYES: May cause severe eye irritation and eye burns if not rinsed from eyes promptly. Symptoms may include stinging, tearing, redness, swelling of eyes and potential corneal damage if not promptly rinsed from eyes.

SKIN: Short single exposure may cause severe skin irritation. Prolonged or repeated exposure may cause skin burns. A single prolonged exposure may result in the material being absorbed in harmful amounts. Skin contact may cause an allergic skin reaction (sensitization) in susceptible individuals.

INHALATION: Inhalation of aerosols or mists may cause respiratory tract irritation.

INGESTION: Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

CHRONIC: Repeated exposure did not produce systemic toxicity when applied to the skin of rabbits and rats.

Individuals with pre-existing disease in or a history of ailments involving the skin, eyes, respiratory tract, liver, kidney, blood or central nervous system are at a greater than normal risk of developing adverse effects when exposed to this material.

4 FIRST AID MEASURES

EYE CONTACT: Immediately flush the eyes with lukewarm, gently flowing water for at least 20 minutes, while holding the eyelids open. Take care not to rinse contaminated water into the unaffected eye or face. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

SKIN CONTACT: Wash affected areas immediately with non-abrasive soap and lukewarm water for 15-20 minutes. Under running water, remove contaminated clothing, shoes, and leather goods (i.e. watchbands, belts). Call a poison control center or doctor for treatment advice. Completely decontaminate clothing, shoes and leather goods before reuse or discard.

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#### 4 FIRST AID MEASURES

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**INHALATION:** Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary edema may be delayed up to 48 hours after exposure. Call a poison control center or doctor for treatment advice.

**INGESTION:** Call a poison control center or doctor immediately for treatment advice. Have person rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have person drink 8-10 oz (240-300 mL) of water to dilute material in stomach. If milk is available, it may be administered AFTER the water has been given. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. Quickly transport person to emergency care facility.

**NOTE TO PHYSICIAN:** Mucosal damage may contraindicate the use of gastric lavage. Pulmonary aspiration hazard if swallowed. Treat symptomatically.

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#### 5 FIRE FIGHTING MEASURES

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**FLASH POINT:** 174 F

**AUTOIGNITION TEMPERATURE:** No information found.

**FLAMMABLE LIMITS (% by volume/air)**

Lower Limit: No information found.

Upper Limit: No information found.

**EXTINGUISHING MEDIA:** Use dry chemical, carbon dioxide, foam or water spray (fog)

**FIRE FIGHTING PROCEDURES:** As in any fire, wear complete fire service protective equipment, including full-face MSHA/NIOSH approved or equivalent self-contained breathing apparatus. Use water to cool fire-exposed container/structure/protect personnel. Toxic vapors may be given off in a fire. Contain run-off from fire.

**FIRE AND EXPLOSION HAZARDS:** When heated (fire conditions), can release toxic vapors. Closed containers may explode when exposed to extreme heat (fire). "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or disposed of properly.

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#### 6 SPILL AND LEAK PROCEDURES

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**SMALL SPILL:** Stop the flow of material. Absorb with non-flammable suitable absorbent such as sand or earth. Scoop/shovel absorbed material into container.

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## 6 SPILL AND LEAK PROCEDURES

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LARGE SPILL: Dike and contain spill. Pump to storage or salvage vessels. Contain run-off from fire control and dilution water. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities that a spill has occurred. Eliminate ALL sources of ignition. Ventilate area.

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## 7 HANDLING AND STORAGE

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Handling Procedures: Avoid skin contact with this material. Avoid eye contact with this material. Avoid prolonged or repeated breathing of this material. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Use this product with adequate ventilation.

Storage Procedures: Do not store near heat, sparks, open flame or strong oxidizing agents. Do not store this material in open, unlabeled containers. Keep in a closed, labeled container within a cool (well-shaded), dry, ventilated area. Protect from physical damage. Empty containers retain product residue (liquid or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode. Follow appropriate grounding procedures, as applicable.

This product should be stored between 10 to 35 C (50 to 97 F).

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## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING CONTROLS: Provide sufficient general / local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits and below flammable vapor concentrations. Ventilation rates should be matched to use conditions. Supplementary local exhaust ventilation may be needed in poorly ventilated spaces, during spraying, heating or other non-routine activities.

### PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Industrial safety goggles and face shield, as necessary.

HAND/SKIN PROTECTION: Chemical resistant, flexible-type gloves (neoprene, nitrile or equal) to prevent contact. Gloves should be rinsed and removed immediately after use. Wash hands after removing gloves. Use protective clothing impervious to this material. Selection of specific items such as boots, apron, or full body suit will depend on operation.

RESPIRATORY PROTECTION: Respiratory protection may be necessary under certain use conditions. A NIOSH-approved respirator should be selected on the basis of the form and concentration of the contaminant.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

OTHER: Facilities utilizing this material should be equipped with an eyewash station and safety shower. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothes before reuse. Items which cannot be decontaminated such as shoes, belts and watchbands, should be removed and destroyed.

9 PHYSICAL AND CHEMICAL PROPERTIES

Weight Per Gallon (lbs): 9.174 % VOL by Weight.: Not determined
Vapor Density.: 10 Max (air=1) Boiling Point...: Not determined
Vapor Pressure: 30 mmHg @90 C Evaporation Rate: Not determined
pH.....: 9.5 - 10.0 Specific Gravity: 1.1 @ 25 C
Solubility In Water: Not determined Viscosity.....: Not determined
VOC Content.....: Not determined

10 STABILITY AND REACTIVITY DATA

STABILITY: Stable under recommended storage conditions. Unstable at elevated temperatures.
HAZARDOUS POLYMERIZATION: Will not occur.
INCOMPATIBILITY: Avoid contact with oxidizing and acidic materials.
HAZARDOUS DECOMPOSITION PRODUCT(S): Thermal decomposition may release toxic gases depending upon temperature, air supply and the presence of other materials.
CONDITIONS TO AVOID: Avoid temperatures above 35C (97F). Can crystallize. Dissolve crystals before use by warming and mixing. Avoid temperatures below 10C (50F). Potentially violent decomposition can cause pressure in closed systems. Pressure build-up can be rapid.

11 TOXICOLOGICAL INFORMATION

ORAL LD50 (rat): 620 mg/kg
DERMAL LD50 (rabbit): 420 mg/kg
INHALATION LC50 (rat): 746 mg/l
MUTAGENICITY: In vitro mutagenicity studies were negative.

12 ECOLOGICAL INFORMATION

This product is toxic to fish and wildlife. Do not contaminate water by cleaning equipment or disposal of waste. Do not discharge effluent containing this

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12 ECOLOGICAL INFORMATION

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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. For guidance, contact your Regional Office of the Environmental Protection Agency.

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13 DISPOSAL CONSIDERATIONS

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Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

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14 TRANSPORTATION INFORMATION

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DOT PROPER SHIPPING NAME:

UN3142, Disinfectant liquid, Toxic, n.o.s. (4-(2-Nitrobutyl)morpholine)

DOT HAZARD CLASS: 6.1 Packing Group III

LABEL: Toxic

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15 REGULATORY INFORMATION

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EPA REGISTRATION NUMBER: 464-659-60061

Ultra Low Sulfur Diesel Additives: The sulfur content of this Diesel Fuel Additive does not exceed 15 parts per million (ppm).

References: Code of Federal Regulations Title 40 Part 80 - EPA 2006 Regulation of Fuels and Fuel Additives, and EPA document EPA40-F-05-013.

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16 OTHER INFORMATION

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NOTICE: This document is generated for the purpose of distributing health, safety and environmental data. The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. Kop-Coat makes no warranty with respect thereto and disclaims all liability from reliance thereon.

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16 OTHER INFORMATION  
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PREPARED BY: Manager of Health, Safety and Environmental Affairs.