



**MATERIAL
SAFETY DATA
SHEET**

VERIGUARD 88

DATE: 01/22/2008

SUPERSEDES: 08/21/2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: VERIGUARD 88
SYNONYMS: Unknown
CHEMICAL FAMILY: BLEND
VERICHEM, 3499 Grand Avenue, Pittsburgh, PA 15225 (412-331-7299, 8:30 am to 5:00 pm)

EMERGENCY PHONE: For any emergency involving spill, leak, fire, exposure, or accident call CHEMTREC: 1-800-424-9300. Outside the USA and Canada call: 703-527-3887.

2. COMPOSITION/INFORMATION ON INGREDIENTS

REGULATED COMPONENTS

COMPONENT	CAS NUMBER	PERCENT	WORKER EXPOSURE	REFERENCE
2-BROMO-2-NITROPROPANE-1,3-DIOL	52-51-7	5.3	Not Determined	PEL/TLV
MAGNESIUM NITRATE	10377-60-3	0.1-1.5	Not Determined	PEL/TLV
5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	26172-55-4	1.90	Not Determined	PEL/TLV
MAGNESIUM CHLORIDE	7786-30-3	0.1-1.5	Not Determined	PEL/TLV

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

APPEARANCE AND ODOR: Yellow liquid with no odor

EFFECTS OF OVEREXPOSURE: Primary route of exposure; Corrosive to skin. Skin sensitizer with delayed onset of symptoms. Direct contact with skin will cause severe delayed skin reactions or burns if not washed off immediately – follow first aid instructions. **PHYSICAL/CHEMICAL HAZARDS:** Danger corrosive to skin. Skin sensitizer with delayed onset of symptoms. Corrosive to the eyes. Mists/aerosols cause irritation to the upper respiratory tract.

4. FIRST AID MEASURES (IN CASE OF CONTACT)

IF IN EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Get medical attention. Remove contact lenses, if present, after the first 5 minute, then continue rinsing eye. Call a poison control center or doctor for treatment advice. **IF ON SKIN OR CLOTHING:** 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. **IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. **IF INHALED:** Move person to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: >200° F >93° C P-M (cc)

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition (destructive fires) yields elemental oxides.

EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTION: Firefighters should wear positive pressure self-contained breathing apparatus (full face-piece type). Proper fire-extinguishing media: Dry chemical, carbon dioxide, foam or water.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. See Section 8 for PPE recommendations. Dyke area to contain spill. Soak up pooled liquid with a suitable absorbent such as clay, sawdust, kitty litter, or fuller's earth. Sweep up the absorbent material and place into an appropriate chemical waste container for disposal. Generously cover contaminated area with slurry of common, powdered household laundry detergent and water. Using a stiff brush, work the slurry into cracks and crevices. Allow to stand for 2 to 3 minutes then flush with water. Repeat if necessary. Do not discharge unless in accordance with Federal, State, and Local Regulations.

7. HANDLING AND STORAGE

STORAGE REQUIREMENTS: Keep containers closed when not in use. If frozen, thaw completely and mix thoroughly prior to use. **HANDLING REQUIREMENTS:** Contains an oxidizer. Avoid all contact with reducing agents, oils, greases, organics and acids. Corrosive to skin and/or eyes.

8. PERSONAL PROTECTION

EYE PROTECTION REQUIREMENTS: Splash proof chemical goggles, face shield. **SKIN PROTECTION REQUIREMENTS:** Gauntlet-type butyl gloves, chemical resistant apron – Wash off after each use. Replace as necessary. **VENTILATION REQUIREMENTS:** Adequate ventilation to maintain air contaminants below exposure. **RESPIRATOR REQUIREMENTS:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. Use air purifying respirators within use limitations associated with the equipment or else use supplied limitations associated with the equipment or else use supplied air-respirators. If air-purifying respirator use is appropriate, use a respirator with organic vapor/acid gas cartridges and dust/mist pre-filters.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Yellow liquid with no odor
VAPOR PRESSURE:	-18.0 mmHG
SPECIFIC GRAVITY 70 ⁰ F /21 ⁰ C:	1.107
VAPOR DENSITY (air=1):	<1.00
PERCENT VOLATILE (BY WEIGHT):	N/A
pH:	3.0 (approx.)
EVAPORATION RATE (Ether=1):	<1.00
SOLUBILITY IN WATER:	100%

10. STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
HAZARDOUS POLYMERIZATION:	Will not occur
INCOMPATIBILITIES:	May react with strong reducing agents.
DECOMPOSITION PRODUCTS:	Thermal decomposition (destructive fires) yields elemental oxides.
INTERNAL PUMPOUT/CLEANOUT CATEGORIES:	B
REACTIVITY:	N/A

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

ORAL TOXICITY (LD50 Rat):	1,030 mg/kg
DERMAL TOXICITY (LD50 Rabbit):	>2,000 mg/kg
INHALATION TOXICITY:	N/A
EYE IRRITATION (Rabbit):	Corrosive
SKIN IRRITATION (Rabbit):	Corrosive
SENSITIZATION (Guinea Pig):	Negative

12. ECOLOGICAL INFORMATION

FISH AND WILDLIFE

AQUATIC TOXICITY:	Sheepshead minnow (96-hour LC ₅₀):	326.7	NEL:15.5 mg/l
	Mysid shrimp (96-hour LC ₅₀):	40.5	NEL:18 mg/l
	Daphnia magna (96-hour LC ₅₀):	5	NEL: 2.5 mg/l
AVIAN TOXICITY:	Bobwhite quail (acute oral LC ₅₀):	N/A	
	Mallard duck (dietary LC ₅₀):	N/A	
	Bobwhite quail (dietary LC ₅₀):	N/A	

13. DISPOSAL CONSIDERATION

PESTICIDE DISPOSAL: If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is: D002=Corrosive (steel). Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material. **CONTAINER DISPOSAL:** Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by the state and local authorities.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

	DOT Shipping Information	IMO Shipping Information	ICAO/IATA	TRANSPORT CANADA
Shipping Name	Corrosive Liquid, Acidic, Organic, N.O.S. (5-chloro-2-methyl-4- isothiazolin-3-one)			
Hazard Class	8			
Packing Group	III			
Subsidiary Class				
UN/ID Number	UN 3265	UN 3265	UN 3265	
Transport Label Required				
Packing Instructions Passenger Cargo				
Max. Net Quantity Passenger Cargo				
DOT Hazardous Substances				
IMDG Page				

15. REGULATORY INFORMATION

INVENTORY INFORMATION

US TSCA: Exempt

CANADA DSL:

EEC EINECS:

OTHER ENVIRONMENTAL INFORMATION (SARA 313)

COMPONENT: Magnesium Nitrate
CAS. NUMBER: 10377-60-3
PERCENT: 2.0-5.0

PRODUCT CLASSIFICATION UNDER SECTION 312 OF SARA:

ACUTE: Immediate
CHRONIC: Delayed

16. OTHER INFORMATION

NFPA HAZARD RATING (NATIONAL FIRE PROTECTION ASSOCIATION)

FIRE: 1
HEALTH: 3
REACTIVITY: 0

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