



MATERIAL SAFETY DATA SHEET

VERIGUARD 19

DATE: 07/18/2007

CAS# 2634-33-5

SUPERSEDES: 08/21/2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: VeriGuard® 19
SYNONYMS: This product has no synonyms
CHEMICAL FAMILY: Biocidal preparation containing Benzisothiazolin in Dipropylene Glycol

VERICHEM INC., 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. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

ROUTES OF EXPOSURE:

Inhalation: Yes Skin Contact: Yes Ingestion: Yes Eye: Yes Skin Absorption: No

EFFECTS OF OVEREXPOSURE:

1,2-Benzisothiazolin-3-one: A severe eye corrosive that can cause serious damage to the eyes. If not promptly treated, permanent damage with loss or impairment of sight can result. A contact skin sensitizer in human patch testing at 689 ppm. Dermatitis, chemical burns, and skin sensitization can develop after repeated and/or prolonged contact with human skin. 1,2-Benzisothiazolin-3-one is toxic by ingestion. Inhalation may cause irritation of mucous membranes and upper respiratory tract.

Sodium Hydroxide: Acute eye contact causes severe burns. Small quantities can result in permanent damage and/or loss of vision. Acute skin contact may result in corrosive action causing burns and frequently deep ulceration with subsequent scarring. Prolonged contact destroys tissue. Mist from solutions can cause irritant dermatitis. Acute ingestion can cause very serious damage to the mouth, esophagus, stomach and other tissues with which contact is made. Ingestion may be fatal. Acute inhalation of mists can cause damage to the upper respiratory tract and to the lung tissue depending on extent of exposure. Effects can range from mild irritation of mucous membranes to severe pneumonitis to destruction of lung tissues. Chronic effects of long-term, low-level exposures have not been determined. Safe handling should avoid all effects from repetitive acute exposures. The acute oral LD50 in rats is 1,250 - 2,500 mg/kg. Irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion. Based on animal studies, this product is corrosive to skin and eyes. Eye or skin contact can result in chemical burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

REGULATED COMPONENTS

COMPONENT	CAS NUMBER	PERCENT	WORKER EXPOSURE	REFERENCE
1,2-Benzisothiazolin-3-(2H)-one	2634-33-5	18.5		
Sodium Hydroxide	1310-73-2	<=3	2mg/m3	US ACGIH Threshold Limit Values / US OSHA (Z-1-A)

4. **FIRST AID MEASURES (IN CASE OF CONTACT)**

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.

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 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 minutes, then continue rinsing eye. 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. NOTE: Probable mucosal damage may contraindicate the use of gastric lavage.

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:>230° F
AUTOIGNITION TEMPERATURE:.....>392° F

EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTION

Exercise caution when fighting any chemical fire. Use NIOSH approved self-contained breathing apparatus and full protective clothing. **Emits toxic and corrosive fumes under fire conditions.**

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.
- This product is toxic to fish. Do not discharge unless in accordance with Federal, State, and Local Regulations.

7. **HANDLING AND STORAGE**

STORAGE REQUIREMENTS: Store in original container, tightly closed and in a safe place. Do not use or store near heat or open flame. Do not contaminate water, food or feed by improper storage or disposal.

8. **PERSONAL PROTECTION**

RESPIRATOR REQUIREMENTS: If aerosols, mists, or dusts are generated from the use of this product or in conjunction with spill cleanup or emergency response, use NIOSH/MSHA approved respiratory protection.

SKIN PROTECTION REQUIREMENTS: Chemical resistant gloves and protective clothing (apron). (Gloves of butyl rubber or nitrile may provide protection against permeation. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use.)

EYE PROTECTION REQUIREMENTS: Chemical splash goggles and face shield or when required, a NIOSH approved respirator with full face piece. Safety eye wash stations and showers should be provided in all areas where this material is handled.

VENTILATION REQUIREMENTS: Local exhaust ventilation may be required in addition to general room ventilation to maintain airborne concentrations below exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Light brown odorless liquid, viscous
BOILING POINT:	Approx. 206° F
MELTING POINT:	Not available
FREEZING POINT:	<23° F
VAPOR PRESSURE:	Not available
SPECIFIC GRAVITY 20° C:	1.12 – 1.16 g/cm ³ (20° C)
VAPOR DENSITY:	Not available
PERCENT VOLATILE (BY WEIGHT):	Not available
pH:	>12
EVAPORATION RATE:	Not available
SOLUBILITY IN WATER:	Miscible (20° C)
VISCOSITY:	410 mPa.s (20° C)

10. STABILITY AND REACTIVITY

STABILITY / THERMAL (CONDITIONS TO AVOID):	Oxidizing agents. Corrosive to mild steel, aluminum, copper, and brass.
THERMAL DECOMPOSITION:	243° C
CHEMICAL STABILITY:	Stable
HAZARDOUS POLYMERIZATION:	Will not occur

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

ORAL TOXICITY:	LD50 - >2,000 mg/kg (rat)
DERMAL TOXICITY:	Not available
INHALATION TOXICITY:	Not available
EYE IRRITATION:	Not available
SKIN IRRITATION:	Not available
SENSITIZATION:	Not available

12. ECOLOGICAL INFORMATION

FISH AND WILDLIFE

AQUATIC TOXICITY: LC50 > 10 mg/l (Calculated)

If handled correctly it causes no disturbance in treatment plants. Do not allow to enter soil, waterways or waste water. The classification was made by the conventional (calculation) method of the Dangerous Preparations Directive (199/45/EC)

13. DISPOSAL CONSIDERATION

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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 the label instructions, contact your state pesticide or environmental control agency or the hazardous waste representative at the nearest EPA regional office for guidance. Do not contaminate water, food or feed by improper storage or disposal.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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	Sodium Hydroxide	Sodium Hydroxide	Sodium Hydroxide	Sodium Hydroxide
Hazard Class	8	8	8	8
Packing Group	II	II	II	II
Subsidiary Class	-----	-----	-----	-----
UN/ID Number	UN 1824	UN 1824	UN 1824	UN 1824
Transport Label Required	Corrosive	Corrosive	Corrosive	Corrosive
Packing Instructions				
Passenger	809	809	809	809
Cargo	813	813	813	813
Max. Net Quantity				
Passenger	1 L	1 L	1 L	1 L
Cargo	30 L	30 L	30 L	30 L
DOT Hazardous Substances	Sodium Hydroxide	Sodium Hydroxide	Sodium Hydroxide	Sodium Hydroxide

15. REGULATORY INFORMATION

US TSCA: All components of this product are listed on the Toxic Substances Control Act inventory list. The intended purpose of this product is that of a pesticide and therefore exempt from TSCA.

FDA APPROVAL: 21CFR175.105, 21CFR176.170, 21CFR176.180, 21CFR176.300, 21CFR177.2600

SARA 13: This product does not contain any toxic chemical listed under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986. RQ (Pounds): 1,000 (Sodium Hydroxide)

RCRA: Not considered a hazardous waste

PRODUCT CLASSIFICATION UNDER SECTION 311/312 OF SARA:

ACUTE: Yes

CHRONIC: Yes

FIRE: No

REACTIVE: No

PRESSURE: No

16. OTHER INFORMATION

NFPA HAZARD RATING (NATIONAL FIRE PROTECTION ASSOCIATION):

FIRE: 1 HEALTH: 3 REACTIVITY: 0

HMIS: HAZARDOUS MATERIALS IDENTIFICATION SYSTEM

FIRE: 1 HEALTH: 3 REACTIVITY: 0 PERSONAL PROTECTION: D

THE INFORMATION ON THIS DATA SHEET IS OFFERED SOLELY FOR YOUR INFORMATION, CONSIDERATION, AND INVESTIGATION, AND REPRESENTS OUR CURRENT DATA AND BEST OPINION AS TO THE PROPER USE OF THIS PRODUCT UNDER NORMAL CONDITIONS. ANY USE OF THE PRODUCT WHICH IS NOT IN CONFORMANCE WITH THIS DATA SHEET OR WHICH INVOLVES USING THE PRODUCT IN COMBINATION WITH ANY OTHER PRODUCT OR ANY OTHER PROCESS IS THE RESPONSIBILITY OF THE USER. THIS INFORMATION IS PROVIDED WITHOUT WARRANTIES, EITHER EXPRESSED, OR IMPLIED, AND WE ASSUME NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA CONTAINED HEREIN.