



# VERICHEM

## MATERIAL SAFETY DATA SHEET

### VERIGUARD 9

DATE: 08/21/2006

CAS# 2682-20-4

SUPERSEDES: 8/17/2004

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** VERIGUARD 9  
**CHEMICAL FAMILY:** 2-METHYL-4-ISOTHIAZOLIN-3-ONE  
**MOLECULAR FORMULA:** C<sub>4</sub>H<sub>3</sub>NOS  
**MOLECULAR WEIGHT:** 115.15

**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-METHYL-4-ISOTHIAZOLIN-3-ONE	2682-20-4	9.5-9.9		

#### 3. HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW:

**APPEARANCE AND ODOR:** Clear liquid with mild odor **EFFECTS OF OVEREXPOSURE:** Inhalation of vapor or mist can cause sever irritation of nose, throat and lungs. Material can cause severe, possibly permanent injury. Can be harmful if absorbed through the skin. Can cause severe skin irritation, allergic contact dermatitis. Skin irritation effects can be delayed for hours. Material is harmful if swallowed and fatal in large amounts. Can cause irritation of the mouth, throat, and digestive 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: ..... N/A

FLAMMABLE LIMITS (% BY VOLUME): ..... N/A

AUTOIGNITION TEMPERATURE: ..... N/A

DECOMPOSITION TEMPERATURE:..... N/A

**EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTION:** Combustion generates toxic fumes of nitrogen oxides, sulfur oxides. Use the following extinguishing media when fighting fires involving the material: carbon dioxide, dry chemical, polar solvent (alcohol) foam, and water stream. Wear self-contained breathing apparatus (pressure-demand NIOSH approves or equivalent) and full protective gear. Remain upwind. Avoid breathing smoke. Use water spray to cool containers exposed to fire. Dike and collect water used to fight fire.

**6. ACCIDENTAL RELEASE MEASURES**  
**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Wear a NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode or a full-facepiece airline respirator in the pressure demand mode with emergency escape provisions. Wear compatibility, chemically resistant gloves. Protective clothing made of the following material should be worn to avoid skin contact: butyl rubber, nitrile. For further information see SECTION 8, Exposure Controls/Personal Protective. MATERIAL IS A SEVERE IRRITANT. If exposed to material during clean-up operation, IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water. See SECTION 4, First Aid, for further information. WARNING: KEEP SPILLS AND CLEAN-UP RESIDUALS OUT OF MUNICIPAL SEWERS AND OPEN BODIES OF WATER. Absorb the spill pillows or inert solids such as clay or vermiculite, and transfer contaminated materials to suitable containers for disposal. 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 to deactivate any residual active ingredients. Let stand for 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 the waste pail to deactivate the absorbed material. See SECTION 13, "Disposal Considerations", for information regarding the disposal of contaminated materials.

**7. HANDLING AND STORAGE**

**STORAGE REQUIREMENTS:** The maximum recommended storage temperature for this material is 55° C / 131° F. The minimum recommended storage temperature for this material is 0° C / 32° F. Store in a well ventilated area. Do not store this material near food, feed or drinking water. **HANDLING REQUIREMENTS:** Do not handle MATERIAL near food, feed or drinking water. This material is a severe irritant. See SECTION 8, Exposure Controls/Personal Protection, prior to handling. Containers Hazardous When Empty. Since emptied containers retain product residue (vapors and / or liquid) follow all MSDS and label warnings even after container is emptied.

**8. PERSONAL PROTECTION**

**EYE PROTECTION REQUIREMENTS:** Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed. **SKIN PROTECTION REQUIREMENTS:** Chemical-resistant glove should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. Gloves of these chemically resistant materials may not provide adequate protection: Butyl rubber, Nitrile. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water NOTE: Material is a potential skin sensitizer. Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact. **VENTILATION REQUIREMENTS:** Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Government Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems. **RESPIRATOR REQUIREMENTS:** None required if airborne concentrations are maintained below the exposure limit listed in "Exposure Limit Information". A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. Up to 5 times TWA/TLV: Wear a MSHA/NIOSH approved (or equivalent) half-mask, air-purifying respirator. Up to 100 times the TTWA/TLV or Unknown: Wear a MSHA/NIOSH approved (or equivalent) self-contained breathing apparatus in the positive pressure mode, OR, MSHA/NIOSH approved (or equivalent) full-face airline respirator in the positive pressure mode with emergency escape provisions. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) organic vapor cartridges. **Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.**

**9. PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR: ..... Clear liquid with a mild odor  
BOILING POINT: ..... 100° C / 212° F  
MELTING POINT: ..... -20° to -15° C / -4° to 5° F Solidifies  
VAPOR PRESSURE: ..... No Data  
SPECIFIC GRAVITY 25° C / 25° C: ..... 1.02 @ 20° C / 68° F  
VAPOR DENSITY: ..... No Data  
PERCENT VOLATILE (BY WEIGHT): ..... No Data  
pH: ..... 3 to 7  
SATURATION IN AIR (PERCENT BY VOLUME): ..... No Data  
EVAPORATION RATE: ..... No Data  
SOLUBILITY IN WATER: ..... No Data

**10. STABILITY AND REACTIVITY**

**STABILITY / REACTIVITY:/ THERMAL (CONDITIONS TO AVOID):** This material is considered stable under conditions of storage, shipment and / or use. See SECTION 7, Handling And Storage, for SPECIFIED conditions. Thermal decomposition may yield the following: sulfur dioxide, oxides of nitrogen. This product will not undergo polymerization. Avoid contact with oxidizing agents, reducing agents, amines, and mercaptans.

**11. TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS: NO TOXICITY DATA ARE AVAILABLE FOR THIS MATERIAL. TOXICITY DATA FOR A COMPOSITIONALLY SIMILAR MATERIAL ARE LISTED BELOW.

ORAL TOXICITY (Rat): ..... 1091 mg/kg (female); 2834 mg/kg (male)

DERMAL TOXICITY (Rat): ..... > 5000 mg/kg

INHALATION TOXICITY: ..... N/A

EYE IRRITATION (Rabbit): ..... substantial irritation

SKIN IRRITATION (Rabbit): ..... severe irritation

SENSITIZATION: The following data pertains to studies conducted with the technical material, Experimental biocide active ingredient: Skin Sensitization – guinea pig: Allergic contact dermatitis observed.

MUTAGENICITY: The following data pertains to studies conducted with the technical material, Experimental biocide active ingredient: Ames mutagenicity: Negative

**12. ECOLOGICAL INFORMATION**

**FISH AND WILDLIFE**

**AQUATIC TOXICITY:**

Rainbow trout (96-hour LC<sub>50</sub>): ..... 6 mg/l (active)

Sheepshead minnow (96-hour LC<sub>50</sub>): ..... N/A

Bluegill sunfish (96-hour LC<sub>50</sub>): ..... 10 mg/l (active)

Mysid shrimp (96-hour LC<sub>50</sub>): ..... N/A

Eastern oyster (96-hour LC<sub>50</sub>): ..... N/A

Daphnia magna (48-hour LC<sub>50</sub>): ..... 1.9 mg/l (active)

**AVIAN TOXICITY:**

Bobwhite quail (acute oral LC50): ..... N/A

Mallard duck (dietary LC50): ..... N/A

Bobwhite quail (dietary LC50): ..... N/A

**13. DISPOSAL CONSIDERATION**

Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

**14. TRANSPORT INFORMATION**

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

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

## 15. REGULATORY INFORMATION

### INVENTORY INFORMATION

**US TSCA:** Exempt

**Canada:** This product is subject to regulation under the Canadian Pest Control Products Act (PCP 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.

### OTHER ENVIRONMENTAL INFORMATION

**CERCLA:** (40CFR 302.4) Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

**PRODUCT CLASSIFICATION UNDER SECTION 311/312 OF SARA:** This product is a hazardous chemical under 29CFR 1910.1200, and is categorized as an immediate and delayed health hazard

**PRODUCT CLASSIFICATION UNDER SECTION 313 OF SARA:** This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

## 16. OTHER INFORMATION

### NFPA HAZARD RATING (NATIONAL FIRE PROTECTION ASSOCIATION)

FIRE:	0
HEALTH:	3
REACTIVITY:	0

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