



**MATERIAL SAFETY
DATA SHEET**

DATE: 09/12/2007

SUPERSEDES: 06/22/2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: VERIGUARD OD

SYNONYMS: Tetrahydro-3,5-Dimethyl-2H-1,3,5-Thiadiazine (**Dazomet**) and Ortho phenyl phenol (**OPP**)

DAZOMET

CHEMICAL FAMILY: Thione

MOLECULAR FORMULA: C₅H₁₀N₂S₂

MOLECULAR WEIGHT: 162.27

OPP

CHEMICAL FAMILY: Ortho Phenyl phenol

MOLECULAR FORMULA: C₁₂H₁₀O

MOLECULAR WEIGHT: 170

VERICHEM, 3499 Grand Avenue, Pittsburgh, PA, USA, 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

APPEARANCE AND ODOR: Clear to slight haze, nearly odorless liquid.

EFFECTS OF OVEREXPOSURE:

HUMAN: CORROSIVE causes irreversible eye damage. Harmful if on skin. Harmful if swallowed.

ENVIRONMENTAL: Toxic to fish

3. COMPOSITION/INFORMATION ON INGREDIENTS

REGULATED COMPONENTS

COMPONENT	CAS NUMBER	PERCENT	WORKER EXPOSURE	REFERENCE
O-phenylphenol	90-43-7	15	None Established	N/A
Tetrahydro-3,5-Dimethyl-2H-1,3,5-Thiadiazine	533-74-4	5	None Established	N/A

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 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.

IF ON SKIN: 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.

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:	This product is not flammable
FLAMMABLE LIMITS (% BY VOLUME):	N/A
AUTOIGNITION TEMPERATURE:	N/A
DECOMPOSITION TEMPERATURE:	Greater than 212°F/100°C

EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTION

Vapors and products of combustion are corrosive to the respiratory tract and may cause breathing difficulty and pulmonary edema. As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate nonessential personnel from the fire area. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Use standard fire-fighting techniques to extinguish fires involving this material. Use water, dry chemicals, foam or carbon dioxide. If drums are NOT leaking, keep cooled with a water spray. High-pressure water hoses may spread product from broken containers, increasing contamination hazard. Contaminated building, areas and equipment must not be used until they are properly decontaminated. If fire cannot be controlled and containers are heated, EVACUATE THE AREA!

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. Any person entering an area of a significant spill or of an unknown concentration of an aerosol should use a NIOSH approved, positive pressure self-contained breathing apparatus or a NIOSH approved positive pressure air supplied respirator with escape pack. Small spills can be handle routinely. Use adequate ventilation and or wear a NIOSH approved organic vapor respirator with dust mist and fume filter to prevent inhalation exposure. Wear protective clothing to prevent skin and eye contact. Use the following procedures: Soak up pooled liquid with a suitable absorbent such as clay, sawdust kitty litter or fuller's earth. Sweep up the absorbed 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 2-3 minutes then flush with water. Repeat if necessary. Large spills must be handled according to a predetermined plan.

7. HANDLING AND STORAGE

Storage Requirements: Containers should be stored at room temperature in dry, well-ventilated area away from flammable materials and sources of heat or flame. Store away from foodstuffs or animal feed. Exercise due caution to prevent damage to or leakage from the container. Avoid prolonged storage at temperatures above 158°F (70°C). Containers should not be opened until ready for use.

8. PERSONAL PROTECTION

EYE PROTECTION REQUIREMENTS: Protective eyewear / goggles and full-face shield.

SKIN PROTECTION REQUIREMENTS: Long-sleeved shirt and long pants, socks, Chemical-resistant footwear and gloves.

VENTILATION REQUIREMENTS: Use local exhaust ventilation where vapor may be generated.

RESPIRATOR REQUIREMENTS: For irritating vapors, use a NIOSH approved respirator in accordance with OSHA regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Clear almost water white, nearly odorless liquid.
BOILING POINT:	Decomposes before boiling
MELTING POINT:	N/A
VAPOR PRESSURE:	Unknown
SPECIFIC GRAVITY:	1.135 g/ml @ 25° C
VAPOR DENSITY:	Unknown
PERCENT VOLATILE (BY WEIGHT):.....	Unknown
pH:	6.62 @ 1% W/W
VISCOSITY:.....	205.68 CS (20° C)
SATURATION IN AIR (PERCENT BY VOLUME):	UNKNOWN
EVAPORATION RATE:	UNKNOWN
SOLUBILITY IN WATER:	COMPLETE

10. STABILITY AND REACTIVITY

This product is stable at room temperature and ambient conditions. The product has been tested at 50°C (122°F) for thirty days and showed 0% degradation. The product will slowly decompose at temperatures of 100°C (212°F). This product is not corrosive to steel or aluminum. STABILITY (CONDITIONS TO AVOID): Strong Acids, Oxidizers

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

ORAL:	LD ₅₀ (Rat) - >2000 mg/kg
DERMAL:	LD ₅₀ (Rat) - >2000 mg/kg
INHALATION:	LC ₅₀ (Rat) - 2.10 mg/l (4 hr)
EYE IRRITATION:	Severe Irritant
SKIN IRRITATION:	Slight Irritant (Index 0.8)
SENSITIZER:	Not a sensitizer

12. ECOLOGICAL INFORMATION

FISH AND WILDLIFE

AQUATIC: This material is toxic to fish. Do not contaminate water sources by cleaning equipment or disposing of wastes. The LC50 for OPP in fathead minnows is 20mg/l and the LC50 for Dazomet in Rainbow Trout is 16.2 mg/l.

13. DISPOSAL CONSIDERATION

Do not contaminate water, food or feed by storage or disposal.

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 label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: PLASTIC CONTAINERS: 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	Non Hazardous	N/A	N/A	Non Hazardous
Hazard Class	Non Hazardous	N/A	N/A	Non Hazardous
Packing Group	Non Hazardous	N/A	N/A	Non Hazardous
Subsidiary Class	Non Hazardous	N/A	N/A	Non Hazardous
UN/ID Number	Non Hazardous	N/A	N/A	Non Hazardous
Transport Label Required	Non Hazardous	N/A	N/A	Non Hazardous
Packing Instructions Passenger Cargo	Non Hazardous	N/A	N/A	Non Hazardous
Max. Net Quantity Passenger Cargo	Non Hazardous	N/A	N/A	Non Hazardous
D.O.T. Hazardous Substances	Non Hazardous	N/A	N/A	Non Hazardous

15. REGULATORY INFORMATION

INVENTORY INFORMATION

US TSCA: YES

CANADA DSL: YES

EEC EINECS: YES

16. OTHER INFORMATION

NFPA HAZARD RATING (NATIONAL FIRE PROTECTION ASSOCIATION)

FIRE: 1

HEALTH: 2

REACTIVITY: 0

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