



**MATERIAL SAFETY  
DATA SHEET**

# VERIGUARD DBDCB AD

DATE: 05/29/2008

CAS NO: 35691-65-7  
SUPERSEDES: 06-11-2007

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** VERIGUARD DBDCB AD  
**SYNONYMS:** 1,2-Dibromo-2,4-Dicyanobutane  
**CHEMICAL FAMILY:** Brominated Organic  
**MOLECULAR FORMULA:** C<sub>6</sub>H<sub>6</sub>N<sub>2</sub>Br<sub>2</sub>  
**MOLECULAR WEIGHT:** 266

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:**..... White to off white, viscous, opaque liquid.

### EFFECTS OF OVEREXPOSURE

**HUMAN: DANGER. CORROSIVE** Causes irreversible eye damage. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing. Wear goggles, safety glasses or face shield when handling. Avoid contact with skin. Do not breathe vapor or spray mist dust. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL:** ..... Toxic to fish

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### REGULATED COMPONENTS

COMPONENT	CAS NUMBER	PERCENT	WORKER EXPOSURE	REFERENCE
1,2,-Dibromo-2,4-dicyanobutane	35691-65-7	25.0	Not established	Not established

## 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:** 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.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

5. **FIRE FIGHTING MEASURES**

**FLAMMABLE PROPERTIES**

This product is not by definition a “flammable liquid” or a “combustible liquid”.

FLASH POINT:

Not Flammable

FLAMMABLE LIMITS (% BY VOLUME):

Not Applicable

AUTOIGNITION TEMPERATURE:

Not Applicable

DECOMPOSITION TEMPERATURE:

>50° C

**EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTION**

Product is not flammable. If product is involved with other substances, use water, dry chemical or CO<sub>2</sub>. Exercise caution when fighting fires involving chemical substances. Respiratory protection is required. As in any fire, prevent human exposure to fire, smoke, fumes, or products of combustion. Evacuate nonessential personnel from the fire area. Fire fighters 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 spray, dry chemicals, foam or carbon dioxide. If drums are NOT leaking, keep fire-exposed containers cool with a water spray to prevent rupture due to excessive heat. High-pressure water hoses may spread product from broken containers, increasing contamination or fire hazards. Contaminated buildings, 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**

Immediately dyke material to keep away from water sources. Scoop up material. Residual amounts left on surfaces may be cleaned with soap and water. Rinse residuals to municipal treatment plant.

7. **HANDLING AND STORAGE**

**Handling:** Use with proper ventilation and personal protection. Wash thoroughly after handling.

**Storage:** Keep container closed when not in use. Store out of heat; material melts at temperature >50° C. Keep from freezing. Shelf Life = 1 year

8. **PERSONAL PROTECTION**

**EYE PROTECTION REQUIREMENTS:** Protective eye wear (fitted goggles). **SKIN PROTECTION REQUIREMENTS:** Chemical resistant coveralls worn over long-sleeved shirt and long pants, socks, chemical-resistant footwear and gloves. **VENTILATION REQUIREMENTS:** Use local exhaust ventilation where dust or vapor may be generated. **RESPIRATOR REQUIREMENTS:** NIOSH approved respiratory protection device.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR: ..... Off white opaque viscous liquid slight odor.

BOILING POINT: ..... Similar to water

VAPOR PRESSURE: ..... 55 mmHg @ 40°C

SPECIFIC GRAVITY: ..... 1.1 ± 0.02

VAPOR DENSITY: ..... Similar to water

pH: ..... 6.5-7.5

SOLUBILITY IN WATER (neat): ..... 0.22g/100ml (active)

10. **STABILITY AND REACTIVITY**

STABILITY: ..... Stable

POLYMERIZATION: ..... Will not occur

INCOMPATIBLE MATERIALS: ..... Strong acids, bases & oxidizing/reducing agents

HAZARDOUS DECOMPOSITION PRODUCTS: ..... Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, hydrogen bromide, hydrogen cyanide, and nitrogen oxide.

11. **TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS:

Acute Oral (rat): ..... LD<sub>50</sub> 1.7 g/kg (705 mg/kg Active)

Acute Dermal (rabbit): ..... LD<sub>50</sub> >5.0 g/kg

Acute Inhalation (4 hr –rat): ..... LD<sub>50</sub> < 388 mg/l

Primary Skin (Neat): ..... Moderately Irritating

Primary Eye (Neat): ..... Severe Irritant-irreversible eye damage  
 Sensitization: ..... Not a sensitizer

**12. ECOLOGICAL INFORMATION**

LC50 (Neat) (Mallard Duck):..... >10,000 ppm  
 LC50 (Neat) (Bobwhite Quail):..... 4042 ppm  
 LC50 (Neat) Bluegill Sunfish (96 hrs.): ..... 4.09 mg/l  
 LC50 (Neat) Rainbow Trout (96 hrs.): ..... 1.75 mg/l  
 LC50 (Neat) Sheepshead Minnows (96 hrs.): ..... 17 mg/l  
 LC50 (Neat) Daphnia magna (48 hrs.): ..... 2.2 mg/l  
 LC50 (Neat) Grass Shrimp (48 hrs.): ..... 45 mg/l  
 LC50 (Neat) Blue Crabs (96 hrs.): ..... >1000 mg/l

**13. DISPOSAL CONSIDERATION**

**PROHIBITIONS:** Do not contaminate water, food or feed by storage or disposal.  
**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If waste 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:** 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
DBDCB AD	DBDCB AD	DBDCB AD	DBDCB AD
Not Regulated	Not Regulated	Not Regulated	Not Regulated

**15. REGULATORY INFORMATION**

**INVENTORY INFORMATION**

US TSCA: Yes (Exempt from TSCA when used as a pesticide)  
 CANADA DSL: Yes  
 EINECS: Yes

**PRODUCT CLASSIFICATION UNDER TITLE III SECTION 313 OF SARA**

The following components are defined as toxic chemicals subject to reporting requirements of section 313 title II and of 40 CFR 372 or subject to other EPA regulation.

COMPONENT: 1,2,-Dibromo-2,4-dicyanobutane CAS NUMBER: 35691-65-7 PERCENT: 25%

ACUTE : Health Hazard CHRONIC: Health Hazard

**16. OTHER INFORMATION**

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

0 = insignificant 1 = slight 2 = moderate 3 = serious 4 = extreme  
 FIRE: 1 HEALTH: 3 REACTIVITY: 0

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