

Production date: 02.02.2012  
Trade name: Botector

## I. PRODUCT INFORMATION

**TRADE NAME:** Botector  
**MANUFACTURER:** bio-ferm GmbH, Technopark 1B, 3430 Austria  
**DISTRIBUTOR:** Westbridge Agricultural Products, 12160 Avenida Chelsea,  
Vista, California 92081, USA (800) 876-2767

**POISON CONTROL  
TELEPHONE:** 1(800)222-1222

**COMPOSITION:** *Aureobasidium pullulans* strain DSM 14940: 25-50%

*Aureobasidium pullulans* strain DSM 14941: 25-50%

**ADVISED USE:** Plant Protection Product to Pome Fruit from storage diseases, Grapes and Strawberries from *Botrytis*, and Stone Fruit from *Monilia*  
EPA Reg. No. 86174-3  
EPA Est. No. 86174-AUT-001  
USDA-NOP listed

## II. HAZARDOUS INGREDIENTS

Botector and its ingredients are not listed in the Hazardous Materials List and are not listed as potential carcinogens in OSHA Regulations 29 CFR 1910, Title III of SARA, EPA, RCRA, NTP, IARC, or Extremely Hazardous Substance or Toxic Chemical as defined in Section 302(a)(2) and 313(c) of Federal Register 52 FR (13378-13410 and 347983).

## III. FIRST AID INFORMATION

### EMERGENCY AND FIRST AID PROCEDURES:

Classification of Mixture: complies with the actual legally binding EU Directives and is supplemented by company and literature data.

**HMIS RATINGS:** Health Hazard: 1 Fire Hazard: 0 Physical Hazard: 0

### GENERAL INFORMATION:

Remove from source of exposure. No specific treatment after contact with cells of *A. pullulans* is required since no specific clinical symptoms are known to occur. As a general precautionary measure, persons who may want to seek medical advice, should inform the physician about the identity of the fungus on species level, and may show the label of the packing as supporting information. In case of severely immunocompromised persons an antifungal treatment may be chosen despite the absence of infectivity caused by this strain.

**INGESTION:** Call a poison control center or doctor immediately for treatment advice.  
Have 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.

**SKIN:** Remove contaminated clothes, and wash with soap and water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

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**EYES:** Flush with water for at least 10 minutes and seek medical advice.  
**INHALATION:** Remove from source of exposure. Supply fresh air; consult doctor in case of complaints.

**SUSPECTED CANCER AGENT?**

☒ **X** NO: Federal OSHA, NTP, IARC, Cal/OSHA

**III. PHYSICAL DATA**

**BOILING POINT, 760 MM HG:** Not applicable  
**MELTING POINT:** Not applicable  
**FLASH POINT:** Not applicable  
**IGNITION TEMPERATURE:** Non-flammable (EECA1)  
**SOLUBILITY IN 20°C H<sub>2</sub>O:** Dispersible  
**EXPLOSION DANGER:** Not an explosion hazard. (EECA.14)  
**pH-VALUE (10g/l) at 20°C** 6.6  
**APPEARANCE AND ODOR:** Off white to light pink, odor similar to bread

**IV. FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT:** N/A  
**AUTOIGNITION TEMPERATURE:** N/A  
**EXTINGUISHING MEDIA:** CO<sub>2</sub>, dry chemical powder, foam or water  
**SPECIAL FIRE FIGHTING PROCEDURES:** Non recorded  
**UNUSUAL FIRE AND EXPLOSION HAZARD:** Not applicable  
**FIRE-FIGHTER PROTECTIVE CLOTHING:** Use protective clothing suitable to the situation.

**V. REACTIVITY DATA**

**STABILITY:** Product stable at room temperature.  
**REACTIVITY:** No dangerous reactions are known if used according to specifications.  
**INCOMPATIBILITY (materials to avoid):** Non recorded  
**HAZARDOUS DECOMPOSITION/COMBUSTION PRODUCTS:** None known under normal storage conditions.  
**CONDITIONS TO AVOID:** Keep dry.

**VI. TOXICOLOGY**

**ACUTE TOXICITY:**  
**Oral:** LD50 >2000 mg/kg (rat)  
**Dermal:** LD50 >2000 mg/kg (rat)  
**Inhalation:** LC50/4h >5.18 mg/l (rat)

**PRIMARY IRRITANT EFFECT:**

**Skin:** Not irritating (rabbit, OECD 404)  
**Eye:** Not irritating (rabbit, OECD 405)

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**Sensitization:** May cause sensitization (guinea-pig, OECD 405)

## VII. ECOTOXICITY INFORMATION

### AQUATIC TOXICITY:

EC50/48h >200 mg/l (Water flea (*Daphnia magna*))  
EC/LC50/21d >200 mg/l (Water flea (*Daphnia magna*))  
EC50/7d >100 mg/l (Aquatic plant (*Lemna minor*))  
EC50/7d >250 mg/l (Aquatic plant (*Lemna gibba*))

### PERSISTENCE AND DEGRADABILITY:

Soil: Degradation in soil: The product is easily biodegradable.  
Not hazardous to water.

### BIOACCUMULATIVE POTENTIAL:

not tested

### MOBILITY IN SOIL:

not tested

### RESULTS OF PBT AND VPVB ASSESSMENT:

not applicable

## VIII. SPECIAL PROTECTION INFORMATION

**VENTILATION REQUIREMENTS:** Use in a well ventilated area.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT:

**EYE:** Goggles or face protection  
**RESPIRATORY:** A dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.  
**GLOVES:** Chemical-resistant gloves  
**BODY PROTECTION:** Long-sleeved shirt and long pants. Shoes plus socks.

## IX. ACCIDENTAL RELEASE

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Wearing personal protective clothing, goggles, gloves and respirator.  
Collect spilled material with shovel, place into a clean container and cover container loosely.  
Prevent formation of dust. Place into lockable, labeled salvage container for disposal.

**Always dispose of waste materials in accordance with all State, Federal and Local Regulations**

## X. SPILL, LEAK AND DISPOSAL PROCEDURES

### ENVIRONMENTAL PRECAUTIONS:

For disposal, follow all applicable Federal, State and local regulations.

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Do not dispose waste or remains together with domestic waste; do not empty into sink or toilet.  
Do not let enter into drains/surface water bodies or ground water.

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters or rinsate.

## XI. TRANSPORTATION

**DOT:** Non-regulated  
**IMDG/GGVSee:** Not Classified  
**IMDG/GGV-Class:** Not Classified  
**ICACO-TI & IATA-DGR:** Not Classified  
**ADR/RID-GGVSE:** Not Classified

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

## XII. REGULATORY INFORMATION

### **SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):**

This product contains no substances which are denoted as toxic chemicals under the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR Part 372).

**CERCLA:** Not Regulated

**TSCA:** Not Regulated

**PROPOSITION 65:** This product does not contain any substance(s) which are deemed by the state of California to cause cancer, birth defects, or other reproductive effects.

This Product is classified according to the E.U. guidelines.