



**Safety Data Sheet - GHS**

**1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY**

**PRODUCT NAME:** ESTEEM® Ant Bait  
**EPA REGISTRATION NUMBER:** 59639-114  
**VC NUMBER(S):** 1306 & 1505  
**SYNONYM(S):** None  
**PRODUCT DESCRIPTION:** Insect Growth Regulator

Esteem is a registered trademark of Valent U.S.A. LLC

**MANUFACTURER/DISTRIBUTOR**  
 VALENT U.S.A. LLC  
 P.O. Box 5075  
 4600 Norris Canyon Road  
 San Ramon, CA 94583

**EMERGENCY TELEPHONE NUMBERS**  
 HEALTH EMERGENCY OR SPILL (24 hr):  
 (800) 892-0099  
 TRANSPORTATION (24 hr.): CHEMTREC  
 (800) 424-9300 or (202) 483-7616

**PRODUCT INFORMATION**  
 AGRICULTURAL PRODUCTS: (800) 682-5368

The current SDS is available through our website ([www.valent.com](http://www.valent.com)), or by calling the product information numbers listed above.

**2. HAZARDS IDENTIFICATION**

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA-required classifications on the product label. Certain sections of this SDS are superseded by federal law under EPA FIFRA for a registered pesticide. Please see Section 15, REGULATORY INFORMATION for an explanation.

**Classification** - (per U.S. OSHA 29 CFR 1910.1200 (Hazcom 2012))

**Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).**

**Label elements**

**EMERGENCY OVERVIEW**

**No Signal Word is required for this material.**

**Precautionary statements**

**Prevention**  
 None

**Response**

**Eyes** None.  
**Skin** None.  
**Inhalation** None.  
**Ingestion** None.  
**FIRE** None.  
**Spill** None.

**Storage**  
 None

**Disposal**  
 None

**Hazards not otherwise classified (HNOC)**

**Other Information**

For information on Transportation requirements, see Section 14.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No.	Weight-%	TRADE SECRET
Pyriproxyfen	95737-68-1	0.5	
Others	No CAS#	99.45 - 99.55	-

Other ingredients, which may be maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling **(800) 892-0099** at any time.

**4. FIRST AID MEASURES**

**EMERGENCY NUMBER (800) 892-0099**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

**EYE CONTACT:**

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**SKIN CONTACT:**

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.

**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 the poison control center or doctor. Do not give anything to an unconscious person.

**INHALATION:**

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration,

preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**NOTES TO PHYSICIAN:**

None

**5. FIRE FIGHTING MEASURES**

Flash point °C  
 Flash point °F Not applicable  
 FLASH POINT METHOD: Not applicable  
 EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical  
 FLAMMABLE LIMITS IN AIR - LOWER (%): Not applicable  
 FLAMMABLE LIMITS IN AIR - UPPER (%): Not applicable

**NFPA RATING:**

Health: 1  
 Flammability: 2  
 Reactivity: 0  
 Special: None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

**FIRE FIGHTING INSTRUCTIONS:** Products of combustion from fires involving this material may be toxic. Smoke and fumes are extremely irritating to eyes, nose, throat and lungs. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire-fighting equipment before reuse. Read the entire document.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Normal combustion forms carbon dioxide, water vapor and may produce: oxides of nitrogen,. Incomplete combustion can produce carbon monoxide.

**6. ACCIDENTAL RELEASE MEASURES**

**VALENT EMERGENCY PHONE NUMBER: (800) 892-0099**  
**CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300**  
**OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION**  
 Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response Guidebook.

**UN/NA NUMBER:** Not applicable      **EMERGENCY RESPONSE GUIDEBOOK NO.:** Not applicable

**FOR SPILLS ON LAND:**

**CONTAINMENT:** Reduce airborne dust. Avoid runoff into storm sewers or other bodies of water.

**CLEANUP:** Clean up spill immediately. Vacuum or sweep up material and place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

**FOR SPILLS IN WATER:**

**CONTAINMENT:** This material is insoluble in water. This material will sink to the bottom. Stop or reduce contamination of any water. Isolate contaminated water.

**CLEANUP:** Remove contaminated water for treatment or disposal.

**7. HANDLING AND STORAGE**

**END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

**HANDLING:**

Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Users should wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet.

**STORAGE:**

Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight. Keep container closed when not in use. Not for use or storage in or around the home.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

**EYES & FACE:** Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

**RESPIRATORY PROTECTION:** Use this material only in well ventilated areas. If operating conditions result in airborne concentrations of this material, the use of an approved respirator is recommended.

**SKIN & HAND PROTECTION:** Avoid contact with skin or clothing. Skin contact can be minimized by wearing protective clothing including gloves.

**EXPOSURE LIMITS**

Chemical name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Pyriproxyfen	None	None	None
Others	None	None	Not known

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	Solid	<b>Odor</b>	Mild Soybean oil odor
<b>Appearance</b>	Flakes (corn grits)	<b>Odor threshold</b>	No information available
<b>Color</b>	Golden		

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	6.6	@ 25° C (1% w/v dispersion in water)
<b>Melting point/freezing point</b>	No information available	
<b>Boiling point/boiling range</b>	No information available	
<b>Flash point</b>	Not applicable	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limits in Air</b>		
<b>Upper flammability limits</b>	Not applicable	

<b>Lower flammability limit</b>	Not applicable
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific Gravity</b>	No information available
<b>Water solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	18-22 lb/ft <sup>3</sup>

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY:**

Oral Toxicity LD <sub>50</sub> (rats)	>5000 mg/kg	EPA Tox Category	IV
Dermal Toxicity LD <sub>50</sub> (rabbits)	>2000 mg/kg	EPA Tox Category	III
Inhalation Toxicity LC <sub>50</sub> (rats)	Minimally toxic	EPA Tox Category	IV
Eye Irritation (rabbits)	Brief and/or minor irritation	EPA Tox Category	III
Skin Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category	Not applicable

**CARCINOGEN CLASSIFICATION**

Chemical name	IARC Group 1 or 2	OSHA - Select Carcinogens	NTP Carcinogen List
Pyriproxyfen	Not listed	Not listed	Not listed
Others	Not Listed	Not listed	Not listed

**TOXICITY OF PYRIPROXYFEN TECHNICAL**

**SUBCHRONIC:** Subchronic oral toxicity studies conducted with Pyriproxyfen Technical in the rat, mouse and dog

indicate a low level of toxicity. Effects observed at high dose levels consisted primarily of decreased body weight; increased liver weights; histopathological changes in the liver and kidney; decreased red blood cell counts, hemoglobin and hematocrit; altered blood chemistry parameters; and, at 5000 and 10000 ppm in mice, a decrease in survival rates. The NOELs from these studies were 1000 ppm (149.4 mg/kg/day) in mice, 100 mg/kg/day in dogs and 400 ppm (23.5 mg/kg/day) in rats. In a 4 week inhalation study of Pyriproxyfen Technical in rats, decreased body weight and increased water consumption was observed at 1000 mg/m<sup>3</sup>. The NOEL in this study was 482 mg/m<sup>3</sup>. A 21-day dermal toxicity study in rats with Pyriproxyfen Technical did not produce any signs of dermal or systemic toxicity at 1000 mg/kg/day.

**CHRONIC/CARCINOGENICITY:** Pyriproxyfen Technical has been tested in chronic studies with dogs, rats and mice. Dogs exposed to dose levels of 300 mg/kg/day or higher for 52 weeks showed overt clinical signs of toxicity, elevated levels of blood enzymes and liver damage. The NOEL in this study was 100 mg/kg/day. In a 78 week study in mice, dietary levels of 3000 ppm or greater produced gross and histopathological changes in the kidney. The NOEL in this study was 600 ppm. In a 2-year study in rats, dietary levels of 3000 ppm or greater produced decreased body weights in female rats. The NOEL in the rat study was 600 ppm. No oncogenic response was produced in mice or rats.

**DEVELOPMENTAL TOXICITY:** Tests for developmental toxicity in rats and rabbits were conducted with Pyriproxyfen Technical. In the study conducted with rats, maternal toxicity (mortality, decreased body weight gain and food consumption and clinical signs of toxicity) was observed at doses of 300 mg/kg/day and greater. The maternal NOEL was 100 mg/kg/day. A transient increase in skeletal variations was observed in rat fetuses exposed to 300 mg/kg/day and greater. The NOEL for prenatal developmental toxicity was 100 mg/kg/day. An increased incidence of visceral and skeletal variations was observed postnatally at 1000 mg/kg/day. The NOEL for postnatal developmental toxicity was 300 mg/kg/day. In the study conducted with rabbits, maternal toxicity (clinical signs of toxicity including one death, decreased body weight gain and food consumption, and abortions or premature deliveries) was observed at oral doses of 300 mg/kg/day or higher. The maternal NOEL was 100 mg/kg/day. No developmental effects were observed in the rabbit fetuses. The NOEL for developmental toxicity in rabbits was 1000 mg/kg/day.

**REPRODUCTION:** A dietary rat reproduction study was conducted with Pyriproxyfen Technical. Systemic toxicity (reduced body weights, histopathological changes in the liver and kidney, and increased liver weight) was produced at 5000 ppm. The systemic NOEL was 1000 ppm. No effects on reproduction were produced even at 5000 ppm, the highest dose tested.

**MUTAGENICITY:** Pyriproxyfen Technical was negative in the following tests for mutagenicity: Ames Assay with and without S9, unscheduled DNA synthesis in HeLa S3 cells, *in vitro* gene mutation in V79 Chinese hamster cells, and *in vitro* chromosomal aberration in Chinese hamster ovary cells.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

## 12. ECOLOGICAL INFORMATION

The following information is based upon studies conducted on the Technical Grade Material which indicates Aquatic Toxicity Category 1. However as this Ant Bait product contains <0.55% of active ingredient, based upon calculation this product is not considered to be an Aquatic Hazardous material for transportation purposes.

**AVIAN TOXICITY:** Pyriproxyfen Technical is practically non-toxic to avian species. Test results include:

Oral LD<sub>50</sub> mallard duck: > 2000 mg/kg  
Oral LD<sub>50</sub> bobwhite quail: > 2000 mg/kg  
Dietary LC<sub>50</sub> mallard duck: > 5200 ppm  
Dietary LC<sub>50</sub> bobwhite quail: > 5200 ppm  
Reproduction bobwhite quail: NOEC = 600 ppm  
Reproduction mallard duck: NOEC = 600 ppm

**AQUATIC ORGANISM TOXICITY:** Pyriproxyfen Technical is moderately to highly toxic to fish and moderately to very highly toxic to aquatic invertebrate species. Test results include:

Freshwater species:

LC<sub>50</sub> (96 hr) Bluegill Sunfish: > 270 µg/L

LC<sub>50</sub> (96 hr) Rainbow Trout: > 325 µg/L

LC<sub>50</sub> (21 day) Rainbow Trout: 90 µg/L

LC<sub>50</sub> (96 hr) Carp: 450 µg/L

LC<sub>50</sub> (96 hr) Killifish: 2660 µg/L

EC<sub>50</sub> (48 hr) Daphnia magna: 400 µg/L

MATC (21 day) Daphnia magna: 20 ppt

MATC (Early Life Cycle) Rainbow Trout: 5.4 µg/L

Estuarine species:

LC<sub>50</sub> (96 hr) Sheepshead Minnow: > 1.02 ppm

LC<sub>50</sub> (96 hr) Mysid Shrimp: 65 ppb

EC<sub>50</sub> (96 hr) Oyster Shell Deposition: 92 ppb

**OTHER NON-TARGET ORGANISM TOXICITY:**

Pyriproxyfen Technical is practically non-toxic to bees. The acute contact LC<sub>50</sub> in bees was greater than 100 µg/bee.

### 13. DISPOSAL CONSIDERATIONS

**END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.**

**PRODUCT DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Non-refillable outer bag. Do not reuse or refill the outer bag. Completely empty bag into application equipment. Offer bag for recycling if available. If recycling is not available, then dispose of empty bag in a sanitary landfill or by incinerations, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**DISPOSAL METHODS:** Check government regulations and local authorities for approved disposal of this material. Dispose of in accordance with applicable laws and regulations.

### 14. TRANSPORTATION INFORMATION

**DOT (ground) SHIPPING NAME:** Not regulated for domestic ground transport by U.S. DOT

**EMERGENCY RESPONSE**

**GUIDEBOOK NO.:** Not applicable

**ICAO/IATA SHIPPING NAME:** Insecticide, not regulated

**IMDG SHIPPING NAME:** Insecticide, not regulated

### 15. REGULATORY INFORMATION

**EPA-FIFRA LABEL INFORMATION THAT DIFFERS FROM OSHA-GHS REQUIREMENTS:**

Pesticide products in the U.S. are registered by the EPA under FIFRA and are subject to certain labeling requirements

under federal pesticide law. These requirements may differ from the classification criteria and hazard information required by OSHA GHS for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the FIFRA pesticide label:

**EPA FIFRA SIGNAL WORD: CAUTION**

- *Harmful if swallowed, inhaled or absorbed through skin.*
- *Causes moderate eye irritation*
- *Avoid contact with eyes or clothing*
- *Avoid breathing dust*
- *Keep out of reach of children.*

**PESTICIDE REGULATIONS:** All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

**U.S. FEDERAL REGULATIONS:** Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT, TSCA and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

**SARA (311, 312):**

Immediate Health:	Yes
Chronic Health:	Yes
Fire:	No
Sudden Pressure:	No
Reactivity:	No

**STATE REGULATIONS:** Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

**16. OTHER INFORMATION**

<b>REASON FOR ISSUE:</b>	Updated the ecological information (Section 12). Updated transportation information.
<b>SDS NO.:</b>	0077
<b>EPA REGISTRATION NUMBER:</b>	59639-114
<b>REVISION NUMBER:</b>	2
<b>REVISION DATE:</b>	08/20/2020
<b>SUPERCEDES DATE:</b>	05/26/2015
<b>RESPONSIBLE PERSON(S):</b>	Valent U.S.A. LLC, Corporate EH&S, (925) 256-2803



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This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom").

The product label provides information specifically for product use in the ordinary course. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label.

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