

# ESTEEM® 0.86 EC Insect Growth Regulator



## Safety Data Sheet - GHS

### 1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

**PRODUCT NAME:** ESTEEM® 0.86 EC Insect Growth Regulator  
**EPA REGISTRATION NUMBER:** 59639-95  
**VC NUMBER(S):** 1035  
**SYNONYM(S):** S-71639 0.86 EC; Pyriproxyfen 0.86 EC; V-71639 0.86 EC  
**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

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

Acute Toxicity - Inhalation	Category 4
Acute Eye Irritation	Category 2B
Reproductive toxicity	Category 2
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 1

#### Symbols



#### Label elements

#### EMERGENCY OVERVIEW

#### WARNING

Emergency Telephone: (800) 892-0099  
REVISION NUMBER: 3

SDS NO.: 0199  
REVISION DATE: 06/17/2021

**Hazard statements**

Harmful if inhaled.  
 Causes eye irritation.  
 Suspected of damaging fertility or the unborn child.  
 Very toxic to the aquatic life.

**Precautionary statements**

**Prevention**

Avoid breathing mist or spray.  
 Use only outdoors or in a well-ventilated area.  
 Obtain special instructions before use.  
 Wear protective gloves, protective clothing, eye protection and face protection.  
 Wash thoroughly after handling.

**Response**

**IF INHALED:** Remove person to fresh air and keep comfortable. Get medical help.  
**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.  
**IF EXPOSED OR CONCERNED:** Get medical advice/attention.  
**If inhaled:** Remove person to fresh air and keep comfortable for breathing. Call Poison Control Center/ doctor if you feel unwell.

**Storage**

Store locked up.

**Disposal**

Dispose of container/ contents in accordance with local/ state regulations.

For information on Transportation requirements, see Section 14.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No.	Weight-%
Pyriproxyfen	95737-68-1	11.23
Ingredients withheld as a Trade Secret	Various CAS No.'s	88.77

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**

**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**

<b>Flash point °C</b>	Not applicable
<b>Flash point °F</b>	Not applicable
<b>FLASH POINT METHOD:</b>	Not applicable
<b>AUTOIGNITION:</b>	Not applicable
<b>EXTINGUISHING MEDIA:</b>	Water fog, carbon dioxide, foam, dry chemical

**FIRE FIGHTING INSTRUCTIONS:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear. Prevent extinguishing media run off from entering drains, sewers, and bodies of water.

**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**

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

**CLEANUP:** Clean up spill immediately. Contain spill, place into drums for proper disposal. Soak up residue with non-flammable absorbent material. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

**7. HANDLING AND STORAGE**

**HANDLING:**

Wear protective clothing and equipment when handling this product. Goggles or protective eyewear, gloves, long-sleeved shirt, long pants, socks and shoes are appropriate. Avoid contact with eyes, skin or clothing. Wash hands 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, away from heat, flame and strong acids.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**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 ventilation is not adequate to keep airborne concentrations below recommended exposure standards, approved respiratory protection should be worn.

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

**EXPOSURE LIMITS**

Chemical name	Exposure Limits	OSHA PEL Exposure Limits
NAPHTHALENE 91-20-3	TWA 50 mg/m <sup>3</sup>	OSHA
NAPHTHALENE 91-20-3	TWA 10 ppm	ACGIH for skin
PSEUDOCUMENE 95-63-6	TWA 25 ppm	ACGIH
SOLVENT NAPHTHA 64742-94-5	RCP-TWA 100 mg/m <sup>3</sup>	ExxonMobile (Vapor)

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Clear	Vapor pressure	Not determined
Physical State	Liquid	Vapor density	Not determined
Color	Clear yellow	Specific Gravity	Not determined
Odor	Fatty, musty	Water solubility	Not Determined
pH	5.7 @25°C 1% emulsion with water	Solubility in other solvents	Not determined
Melting point / freezing point	Not determined	Partition coefficient	Not determined
Boiling point / boiling range	Not determined	Autoignition temperature	Not determined
Flash point	Not Applicable	Decomposition temperature	Not determined
Evaporation rate	Not determined	Viscosity	Not determined
Flammability (solid, gas)	Not determined	Explosive properties	Not determined
Flammability Limits in Air:		Oxidizing properties	Not determined
Upper flammability limits	Not Applicable	Liquid Density	Not determined
Lower flammability limits	Not Applicable	Bulk density	0.919 gm/cm <sup>3</sup> @ 20°C

**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)	3726-4966 mg/kg bw in male and female rats	EPA Tox Category	III
Dermal Toxicity LD <sub>50</sub> (rats)	2000 mg/kg bw in rabbits	EPA Tox Category	IV
Inhalation Toxicity LC <sub>50</sub> (rats)	> 3.1 mg/mL	EPA Tox Category	II
Eye Irritation (rabbits)	Mildly Irritating	EPA Tox Category	III
Skin Irritation (rabbits)	Moderately irritating to the skin	EPA Tox Category	III
Skin Sensitization (guinea pigs)	Not a sensitizer	EPA Tox Category	N/A

**TOXICITY OF PYRIPROXYFEN TECHNICAL**

**CARCINOGENICITY:** Pyriproxyfen Technical has been tested in chronic studies in mice and rats. No oncogenic response was produced.

**DEVELOPMENTAL TOXICITY:** Pyriproxyfen Technical is not a teratogenic compound in rats or rabbits. The NOAEL for maternal and embryotoxicity in rat was 100 mg/kg body weight/day.

**REPRODUCTION:** In a dietary rat reproduction study with Pyriproxyfen Technical, there was no effect on fertility or reproduction.

**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.

**12. ECOLOGICAL INFORMATION**

**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
  - NOAEC (21 day) Rainbow Trout: 4.3 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: 430 ug/L
  - LC<sub>50</sub> (96 hr) Mysid Shrimp: 65 ug/L
  - EC<sub>50</sub> (96 hr) Oyster Shell Deposition: 92 ug/L

**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

**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:** UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Pyriproxyfen), 9, III, Marine Pollutant

**REMARKS:** In NON-BULK containers (< 119 gal capacity), excepted from Hazmat regulation -see 49CFR 173.150  
If more than 217 gal in one container: NA 1993, Combustible Liquid N.O.S. (contains Naphthalene), 3, III RQ

**ICAO/IATA SHIPPING NAME:** UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Pyriproxyfen), 9, III, Marine Pollutant

**REMARKS:** • Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations – see IATA Special Provision A197  
•For US shipping, Emergency Response Guidebook No. 171  
•Flash point does NOT qualify as Class 3 for IATA shipping - 67°C Closed cup

**IMDG SHIPPING NAME:** UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Pyriproxyfen), 9, III, Marine Pollutant

**REMARKS:** •Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations – see IMDG 2.10.2.7  
•Flash point does NOT qualify as Class 3 for IATA shipping - 67°C Closed cup

### 15. REGULATORY INFORMATION

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

- *Causes moderate eye irritation.*
- *Harmful if inhaled, swallowed or absorbed through skin.*
- *Avoid contact with eyes or clothing.*
- *Avoid breathing vapor or spray mist.*

**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.

#### Inventory Information

All components on TSCA Inventory

Emergency Telephone: (800) 892-0099  
REVISION NUMBER: 3

SDS NO.: 0199  
REVISION DATE: 06/17/2021

**Naphthalene**

Clean Water Act - Hazardous Substances Present  
 Clean Water Act Section 307 Present  
 SARA 313 Chemicals 0.1% de minimis concentration  
 CERCLA Reportable Quantity (RQ): 100 lb (45.4 kg)  
**Product Reportable Quantity (RQ): 267 gallons**

**SARA (311, 312):**

Immediate Health: Yes  
 Chronic Health: Yes  
 Fire: Yes  
 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.

**New Jersey Right To-Know**

**NAPHTHALENE** CAS#: 91-20-3  
**PSEUDOCUMENE** CAS#: 95-63-6

**Pennsylvania Right To-Know**

**NAPHTHALENE** CAS#: 91-20-3  
**PSEUDOCUMENE** CAS#: 95-63-6

**Rhode Island Right To Know**

**NAPHTHALENE** CAS#: 91-20-3  
**Methyl Oleate** CAS#: 112-62-9

**California Proposition 65**

**US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)**

This product can expose you to chemicals including 1,4-Dioxane (CAS # 123-91-1), Ethylene Oxide (CAS # 75-21-8), which is/are known to the State of California to cause cancer, and This product can expose you to chemicals including Ethylene Oxide (CAS # 75-21-8), which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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

**16. OTHER INFORMATION**

**REASON FOR ISSUE:** General update  
**SDS NO.:** 0199  
**EPA REGISTRATION NUMBER:** 59639-95  
**REVISION NUMBER:** 3  
**REVISION DATE:** 06/17/2021  
**SUPERCEDES DATE:** 08/20/2020  
**RESPONSIBLE PERSON(S):** Valent U.S.A. LLC, Corporate EH&S

The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, Valent U.S.A. LLC and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither Valent U.S.A. LLC nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label, it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Valent U.S.A. LLC to confirm that you have the most current product label and SDS.

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.

2021 Valent U.S.A. LLC