Safety Data Sheet

SEIZE™ 35 WP Insect Growth Regulator

1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

PRODUCT NAME: SEIZE™ 35 WP Insect Growth Regulator
EPA REGISTRATION NUMBER: 59639-115
VC NUMBER(S): 1275
SYNONYM(S): V-71639 35 WP Insect Growth Regulator
PRODUCT DESCRIPTION: Insect Growth Regulator

Seize is a trademark of Valent U.S.A. Corporation

MANUFACTURER/DISTRIBUTOR
VALENT U.S.A. CORPORATION
P.O. Box 8025
1600 Riviera Avenue, Suite 200
Walnut Creek, CA 94596-8025

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), or by calling the product information numbers listed above.

2. HAZARDS IDENTIFICATION

For EPA FIFRA-specific information see Section 15

Classification

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Category 4</td>
</tr>
</tbody>
</table>

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements
Harmful if swallowed
Harmful in contact with skin

Precautionary Statements - Prevention
Read product label prior to using this product. For specific handling instruction refer to Section 7, Handling and Storage
Precautionary Statements - Response
See Section 4, First Aid Measures

Precautionary Statements - Storage
For information on Storage and Handling see Section 7.

Precautionary Statements - Disposal
For further information on product and container disposal see Section 13.

Hazards not otherwise classified (HNOC)
Other Information
• Very toxic to aquatic life
• Very toxic to aquatic life with long lasting effects
25% of the mixture consists of ingredient(s) of unknown toxicity

For information on Transportation requirements see Section 14.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight/ Percent</th>
<th>TRADE SECRET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyriproxyfen</td>
<td>95737-68-1</td>
<td>35</td>
<td>TRADE SECRET</td>
</tr>
<tr>
<td>Hydrated Amorphous Silica</td>
<td>112926-00-8</td>
<td>38 - 40</td>
<td>TRADE SECRET</td>
</tr>
<tr>
<td>Kaolin clay</td>
<td>1332-58-7</td>
<td>11 - 12</td>
<td></td>
</tr>
<tr>
<td>Others (including particulates not otherwise classified)</td>
<td>No CAS#</td>
<td>11 - 18</td>
<td>TRADE SECRET</td>
</tr>
</tbody>
</table>

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 by mouth 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 °F: Not applicable
FLASH POINT METHOD: Not applicable
EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical

NFPA RATING:
- Health: 0
- Flammability: 1
- 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. 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.

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 will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further release into soil, surface water and ground water.

CLEANUP: Clean up spill immediately. Absorb spill with inert material. 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. Store in a cool, dry place, out of direct sunlight. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

STORAGE:
Store in a cool, well-ventilated place away from sources of heat and direct sunlight. Keep container tightly closed. Keep only in original container. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Do not store or transport near food or feed. 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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH Exposure Limits</th>
<th>OSHA Exposure Limits</th>
<th>Manufacturer’s Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyriproxyfen</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Hydrated Amorphous Silica</td>
<td>10 mg/m³ (total amorphous dust); 3 mg/m³ (respirable nuisance particulate)</td>
<td>6 mg/m³ (total dust)</td>
<td>None</td>
</tr>
<tr>
<td>Kaolin clay</td>
<td>2 mg/m³ TWA (respirable fraction)</td>
<td>15 mg/m³ TWA</td>
<td>None</td>
</tr>
<tr>
<td>Others (including particulates not otherwise classified)</td>
<td>10 mg/m³ TWA (inhalable particulate); 3 mg/m³ TWA (respirable fraction)</td>
<td>15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)</td>
<td>None</td>
</tr>
</tbody>
</table>
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Powder</td>
</tr>
<tr>
<td>Color</td>
<td>Off-white</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.9</td>
<td>24°C; 1% suspension</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limits</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Dispersible in water</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
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</tr>
<tr>
<td>Bulk density</td>
<td>11.6 lb/ft³</td>
<td></td>
</tr>
</tbody>
</table>

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
Normal combustion forms carbon dioxide, water vapor and may produce: oxides of nitrogen. Incomplete combustion may produce carbon monoxide.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

<table>
<thead>
<tr>
<th></th>
<th>Oral Toxicity LD₅₀ (rats)</th>
<th>Dermal Toxicity LD₅₀ (rabbits)</th>
<th>Inhalation Toxicity LC₅₀ (rats)</th>
<th>Eye Irritation (rabbits)</th>
<th>Skin Irritation (rabbits)</th>
<th>Skin Sensitization (guinea pigs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;5000 mg/kg</td>
<td>&gt;5000 mg/kg</td>
<td>&gt;2.13 mg/L</td>
<td>Eye irritation reversible within EPA Tox Category 7 days.</td>
<td>Mild or slight skin irritation at 72 hours.</td>
<td>Non-sensitizer</td>
</tr>
</tbody>
</table>

EPA Tox Category

Subchronic:

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 postnataally 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.

TOXICITY OF OTHER INGREDIENTS:

This product contains a type of amorphous silica. Inhalation of the dust may produce some or all of the following signs and symptoms: coughing, bronchial irritation, chest discomfort and shortness of breath. Repeated exposure to amorphous silica dust has caused impaired pulmonary function and morphological lung changes in monkeys. Under identical exposure conditions, rats and guinea pigs were unaffected by amorphous silica dust.

IARC reviewed the data on amorphous silica in 1996 and concluded there was inadequate evidence from both epidemiology and experimental studies that amorphous silica is a carcinogenic risk factor. The organization concluded that amorphous silica is in Group 3.

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

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

Oral LD₅₀ mallard duck: greater than 2000 mg/kg
Oral LD₅₀ bobwhite quail: greater than 2000 mg/kg
Dietary LC₅₀ mallard duck: greater than 5200 ppm
Dietary LC₅₀ bobwhite quail: greater than 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:**
- \( LC_{50} \) (96 hr) Bluegill Sunfish: greater than 270 µg/L
- \( LC_{50} \) (96 hr) Rainbow Trout: greater than 325 µg/L
- \( LC_{50} \) (21 day) Rainbow Trout: 90 µg/L
- \( LC_{50} \) (96 hr) Carp: 450 µg/L
- \( LC_{50} \) (96 hr) Killifish: 2660 µg/L
- \( EC_{50} \) (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:**
- \( LC_{50} \) (96 hr) Sheepshead Minnow: greater than 1.02 ppm;
- \( LC_{50} \) (96 hr) Mysid Shrimp: 65 ppb;
- \( EC_{50} \) (96 hr) Oyster Shell Deposition: 92 ppb.

OTHER NON-TARGET ORGANISM TOXICITY: Pyriproxyfen Technical is practically non-toxic to bees. The acute contact \( LC_{50} \) 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:** UN 3077 Environmentally Hazardous Substance, Solid, 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

**IMDG SHIPPING NAME:** UN 3077 Environmentally Hazardous Substance, Solid, 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 2.10.2.7US shipping, Emergency Response Guidebook No. 171

EMS NO.: F-A, S-F

15. REGULATORY INFORMATION

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

This material is a pesticide product registered by the EPA under FIFRA and is 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 swallowed, inhaled or absorbed through skin.
- Avoid contact with eyes, skin and clothing.
- Avoid breathing vapors or spray.
- 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.

Kaolin clay
  - TSCA Inventory List - Present

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.

Hydrated Amorphous Silica
- MA Right To Know Present

Emergency Telephone: (800) 892-0099
SDS NO.: 0210
REVISION NUMBER: 1
REVISION DATE: 05/26/2015
For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

16. OTHER INFORMATION

REASON FOR ISSUE: Updated information to meet OSHA Hazcom 2012 (GHS) regulations.
SDS NO.: 0210
EPA REGISTRATION NUMBER: 59639-115
REVISION NUMBER: 1
REVISION DATE: 05/26/2015
SUPERCEDES DATE: None
RESPONSIBLE PERSON(S): Valent U.S.A. Corporation, Corporate EH&S, (925) 256-2803

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). 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, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products is regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling. All necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

The information in this SDS is based on data available to us as of the revision date given herein, and believed to be correct. Contact Valent U.S.A. Corporation to confirm if you have the most current SDS.

Judgments as to the suitability of information herein for the individual's own use or purposes are necessarily the individual's own responsibility. Although reasonable care has been taken in the preparation of such information, Valent extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the individual's purposes or the consequences of its use.

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