



**Safety Data Sheet - GHS**

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

**PRODUCT NAME:** Zeal® SC Miticide  
**EPA REGISTRATION NUMBER:** 59639-202  
**PRODUCT CODE:** 69767  
**VC NUMBER(S):** VC 1927  
**SYNONYM(S):** None  
**PRODUCT DESCRIPTION:** Miticide

Zeal 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

**2. HAZARDS IDENTIFICATION**

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

**Not Classified**

**Hazards not otherwise classified (HNOC)**

Toxic to aquatic life  
 Toxic to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS Number	Weight Percent
Etoazole	153233-91-1	31.7
Other ingredients	Various	68.3

Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by 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 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 °C** No data available  
**Flash point °F** No data available

**FIRE FIGHTING INSTRUCTIONS:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear, if necessary.

**6. ACCIDENTAL RELEASE MEASURES**

**VALENT EMERGENCY PHONE NUMBER: (800) 892-0099**  
**CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300**

**CONTAINMENT:** Avoid runoff into storm sewers and ditches which lead to waterways. Contain spilled liquids with dry sorbents.

**CLEANUP:** Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then 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.

**7. HANDLING AND STORAGE****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. Keep out of reach of children.

**STORAGE:**

See Handling information above. Do not store at temperatures below 32° F (0° C). If the product is exposed to temperatures below 32° F (0° C), thaw at room temperature to 50° F (10° C) or warmer and shake gently to unify the product.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### EXPOSURE LIMITS

Chemical Name	ACGIH Exposure Limits	OSHA Exposure Limits	US WEEL
Propylene glycol	None	None	TWA 10 ppm
Octamethylcyclotetrasiloxane	None	None	TWA 10 ppm
Sodium hydroxide	2 mg/m <sup>3</sup>	None	None

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

**RESPIRATORY PROTECTION:** Use in well ventilated area. The usual precautions for handling chemicals should be observed.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>		<b>Vapor pressure</b>	Not determined
<b>Physical State</b>	Liquid emulsion	<b>Vapor density</b>	Not determined
<b>Color</b>	Off-white	<b>Specific Gravity</b>	Not determined
<b>Odor</b>	Faint latex paint odor	<b>Water solubility</b>	Dispersible
<b>pH</b>	7.8	<b>Solubility in other solvents</b>	Not determined
<b>Melting point / freezing point</b>	Not determined	<b>Partition coefficient</b>	Not determined
<b>Boiling point / boiling range</b>	Not determined	<b>Autoignition temperature</b>	Not determined
<b>Flash point</b>	Not determined	<b>Decomposition temperature</b>	Not determined
<b>Evaporation rate</b>	Not determined	<b>Viscosity</b>	130 cP @ 20° C 107 cP @ 40° C
<b>Flammability (solid, gas)</b>	Not determined	<b>Explosive properties</b>	Not determined
<b>Flammability Limits in Air:</b>		<b>Oxidizing properties</b>	Not determined
<b>Upper flammability limits</b>	Not determined	<b>Liquid Density</b>	1.09 g/cm <sup>3</sup> @ 20° C
<b>Lower flammability limits</b>	Not determined	<b>Bulk density</b>	Not determined

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under normal ambient 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)	> 5000 mg/kg	EPA Tox Category	IV
Inhalation Toxicity LC <sub>50</sub> (rats)	> 2.09 mg/L	EPA Tox Category	IV
Eye Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Irritation (rabbits)	Slightly irritating, resolved within 48hrs	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Not a sensitizer	EPA Tox Category	Not applicable

**CARCINOGEN CLASSIFICATION**

Chemical Name	IARC	OSHA - Select Carcinogens	NTP Carcinogen List
None	Not listed	Not listed	Not listed

**TOXICITY OF ETOXAZOLE TECHNICAL**

**SUBCHRONIC:** The NOELs in rats and mice were 100 and 400 ppm, respectively. In a 13-week feeding study in dogs with Etoxazole Technical, the NOEL was 200 ppm. In a 28-day dermal toxicity study, no adverse effects were observed at doses of Etoxazole Technical up to 1000 mg/kg/day.

**CHRONIC/CARCINOGENICITY:** Two rat chronic/oncogenicity studies confirm that Etoxazole Technical is not carcinogenic. Two oncogenicity studies were conducted in and found to be not carcinogenic. In a one year study in dogs the NOEL was 200 ppm.

**DEVELOPMENTAL TOXICITY:** No developmental toxicity was observed in rats even at maternally toxic levels of Etoxazole Technical. The developmental NOEL was 1000 mg/kg/day. In rabbits the maternal and developmental NOELs were both 200mg/kg/day.

**REPRODUCTION:** In a two-generation rat reproductive study with Etoxazole Technical, the NOEL for both adults and offspring was 400 ppm.

**MUTAGENICITY:** Etoxazole Technical was negative in the Microbial/Microsome Reverse Mutation Assay (Ames Test), in vivo mouse micronucleus assay, Unscheduled DNA Synthesis and the in vitro chromosome aberration test in Chinese hamster lung cells. A positive response was observed in the mammalian mutation assay using L5178Y mouse lymphoma cells.

**12. ECOLOGICAL INFORMATION**

**AVIAN TOXICITY:** Slightly to practically non-toxic to avian species.

**AQUATIC ORGANISM TOXICITY:** Etoxazole Technical is moderately to highly toxic to fish and very highly toxic to aquatic invertebrates:

96-Hour LC <sub>50</sub> Rainbow Trout:	2.8 mg/L
96-Hour LC <sub>50</sub> Bluegill Sunfish:	1.4 mg/L
96-Hour LC <sub>50</sub> Japanese Carp:	0.89 mg/L
48-Hour EC <sub>50</sub> Daphnia magna:	7.1 µg/L

**OTHER NON-TARGET ORGANISM TOXICITY:** Etoxazole Technical is practically nontoxic to adult worker honey bees. The 48-hour LD<sub>50</sub> values were: Oral LD<sub>50</sub> > 200 µg/bee & Contact LD<sub>50</sub> > 200 µg/bee.

**OTHER ENVIRONMENTAL INFORMATION:**

Do not apply directly to water. Do not contaminate water by disposal of wastes.

### 13. DISPOSAL CONSIDERATIONS

**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:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure 2 more times.

**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

**ICAO/IATA SHIPPING NAME:** UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Etoxazole), 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

**IMDG SHIPPING NAME:** UN 3082, Environmentally hazardous substance, Liquid, N.O.S. (Etoxazole), 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

### 15. REGULATORY INFORMATION

**EPA-FIFRA LABEL INFORMATION:**

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**

- *Keep out of reach of children.*
- *Wash hands before eating, drinking, chewing, using tobacco or using the toilet.*
- *Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.*
- *Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.*

*Environmental hazards*

*This pesticide is toxic to freshwater and marine/estuarine aquatic invertebrates, including oysters and shrimp. 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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.*

**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:	No
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.

**New Jersey Right-To-Know**

Propylene glycol	CAS# 57-55-6
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**Pennsylvania Right-To-Know**

Propylene glycol	CAS# 57-55-6
Dimethyl siloxane, trimethylsiloxy-terminated	CAS# 63148-62-9
Benzoic acid	CAS# 65-85-0
Sodium hydroxide	CAS# 1310-73-2
Oxydipropanol	CAS# 25265-71-8
1,2-Benzisothiazol-3(2H)-one	CAS# 2634-33-5

**Massachusetts Right-To-Know**

Sodium hydroxide	CAS# 1310-73-2
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## 16. OTHER INFORMATION

<b>REASON FOR ISSUE:</b>	General Update
<b>SDS NO.:</b>	0477
<b>EPA REGISTRATION NUMBER:</b>	59639-202
<b>REVISION NUMBER:</b>	2
<b>REVISION DATE:</b>	04/06/2021
<b>SUPERCEDES DATE:</b>	06/04/2015
<b>RESPONSIBLE PERSON(S):</b>	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.

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