



## Safety Data Sheet - GHS

### 1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

**PRODUCT NAME:** Regiment EZ® Herbicide  
**EPA REGISTRATION NUMBER:** 59639-258  
**VC NUMBER(S):** 2168, 2178, 2179  
**SYNONYM(S):** V-10506 3.7 Herbicide  
**PRODUCT DESCRIPTION:** Selective Herbicide

#### MANUFACTURER/DISTRIBUTOR

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

#### EMERGENCY TELEPHONE NUMBERS

HEALTH EMERGENCY (24 hr):  
 (800) 892-0099  
 TRANSPORTATION (24 hr.):  
 U.S. Transportation (24hr): CHEMTREC (800) 424-9300  
 International Transportation (24 hr):703-741-5970

#### 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 (Dusts/Mists)	Category 4
Reproductive toxicity - Category 2	Category 2
Specific target organ toxicity (repeated exposure)	Category 2 (Liver)
Eye Damage/ Irritation-	Category 2B

#### Label elements

#### EMERGENCY OVERVIEW

#### WARNING



#### Hazard statements

Suspected of damaging fertility or the unborn child  
 Causes eye irritation  
 Harmful if inhaled  
 May cause damage to organs (liver) through prolonged or repeated exposure.

**Precautionary statements****Prevention**

Obtain, read and following all safety instructions before use.  
 Wear protective gloves/clothing and eye protection.  
 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 Wash thoroughly after handling.  
 Use only outdoors or in a well-ventilated area.

**Response**

IF EXPOSED or concerned, get medical advice.  
 Get medical attention if you feel unwell.  
 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 help.  
 IF INHALED: remove person to fresh air and keep comfortable for breathing.

**Storage**

Store locked up

**Disposal**

Dispose of contents/container in accordance with local/regional/national regulations.

**Hazards not otherwise classified (HNOC)****Other Information**

- None

For information on Transportation requirements, see Section 14.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%	TRADE SECRET
Bispyribac-sodium	125401-92-5	20-50%	
Propylene glycol	57-55-6	8 - 12	
Sodium Hydroxide	1310-73-2	>0.01	
Octamethyl Cyclotetrasiloxane	556-67-2	>0.01	
Ethylene Oxide	75-21-8	>1.0	
1,4-Diethylene dioxide	123-91-1	>1.0	
Trade Secret	Various	Balance	*

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

**EXTINGUISHING MEDIA:**

Suitable extinguishing media: Foam, dry chemical powder, CO2 or dry sand, water spray

Unsuitable extinguishing media: Rod-like water (straight streams of water).

**FLAMMABLE LIMITS IN AIR - LOWER (%):**

Not applicable

**FLAMMABLE LIMITS IN AIR - UPPER (%):**

Not applicable

**NFPA RATING:**

Health:	1
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:**

Carbon monoxide, carbon dioxide, oxides of nitrogen and chlorides are potential thermal decomposition products

## 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

**CONTAINMENT:** Personal precautions, protective equipment and emergency procedures:

Evacuate non-essential personnel by roping off area of leak or wear appropriate protective gear to avoid breathing vapor and contact with skin, eyes or clothing when working on a spill. (See Section 8). Ventilate if closed area. Avoid runoff into storm sewers and ditches which lead to waterways. Contain spilled liquids with dry sorbents. Remove all sources of ignition

**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. Contain and absorb the rinsate with inert absorbents and place into the same disposal container. Area can be washed with water to remove the last trace of residue. Do not allow water to contaminate water supplies or sewers.

## 7. HANDLING AND STORAGE

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

**HANDLING:**

Keep pesticide in original container. Keep container closed when not in use Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

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.

**STORAGE:**

Store in a cool, dry place. 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. Not for use or storage in or around the home. Keep container tightly closed.

## 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	CAS No.	Value	Basis
Propylene Glycol	57-55-6	10 mg/m <sup>3</sup> TWA	WEEL
Sodium Hydroxide (from Proxel)	1310-73-2	2 mg/m <sup>3</sup> PEL	OSHA, TRANS, Z1A, ACGIH, NIOSH/ GUIDE
Octamethyl Cyclotetrasiloxane	556-67-2	10 ppm TWA	US WEEL
Xanthan gum	11138-66-2	TWA 0.1 mg/m <sup>3</sup>	ACGIH for dust
Ethylene Oxide	75-21-8	TWA 1 PPM	OSHA-PEL
1,4-Diethylene dioxide	123-91-1	100 PPM TWA 20 PPM	OSHA Final PEL TLV-TWA

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Odor	Sweet nutty odor
Appearance	Viscous	Odor threshold	No information available
Color	Off-white		

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	9.0 At 26° C, 1%	
Melting point/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash point	Not applicable	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limits	Not applicable	
Lower flammability limit	Not applicable	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.18	
Water solubility	No data available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	179 cP at 20° C, 228 cP at 40° C	
Explosive properties	No information available	
Oxidizing properties	No information available	
Liquid Density	No information available	
Bulk density	1.18 g/cm <sup>3</sup> at 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.

### Hazardous polymerization

Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

### Conditions to avoid

Extremes of temperature and direct sunlight.

### Incompatible materials

Oxidizers.

### Hazardous Decomposition Products

Under fire conditions, this product may support combustion and may decompose to give off toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

The following information is based on data available for the technical material or a similar formulation.

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)	Minimally irritating	EPA Tox Category	IV
Skin Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer (LNNA)	EPA Tox Category	Not applicable

## TOXICITY OF BISPYRIBAC-SODIUM TECHNICAL

**SUBCHRONIC:** Subchronic studies were conducted in the rat, mouse, and dog with Bispyribac-sodium Technical. The liver and bile duct were identified as the target organs in the subchronic and chronic toxicity studies across species. NOAELs for the rat and mouse were similar at 71.9/79.9 mg/kg/day (M/F) and 68.6/79.0 mg/kg/day (M/F), respectively. The NOAEL in the dog study was 100 mg/kg/day.

**CHRONIC/CARCINOGENICITY:** Chronic toxicity and carcinogenicity were evaluated in the rat, mouse, and dog. NOAELs for chronic toxicity were similar for across species, *i.e.*, 10.9, 14.1/17.4 (M/F), and 10 mg/kg/day for the rat, mouse, and dog, respectively. There was no evidence of carcinogenicity in the rat or mouse. Bispyribac-sodium was classified as "not likely to be carcinogenic to humans."

**NEUROTOXICITY:** Bispyribac-sodium Technical was not neurotoxic in the rat, mouse, or dog in repeated dose studies.

**DEVELOPMENTAL TOXICITY and REPRODUCTION:** Bispyribac-sodium was negative for fetal toxicity and showed no evidence of offspring susceptibility in both the developmental studies in rats and rabbits and in the reproduction study. The NOAEL for reproductive toxicity in the rat was >759 mg/kg/day.

**MUTAGENICITY:** Bispyribac-sodium Technical was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

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

Oral LD<sub>50</sub> Bobwhite Quail: greater than 2,250 ppm  
 Dietary LC<sub>50</sub> Bobwhite Quail: greater than 5,620 ppm  
 Dietary LC<sub>50</sub> Mallard Duck: greater than 5,620 ppm

96-hour LC<sub>50</sub> Rainbow Trout: greater than 102 mg/L  
 96-hour LC<sub>50</sub> Bluegill Sunfish: greater than 102 mg/L  
 48-hour LC<sub>50</sub> Daphnia magna: greater than 99.2 mg/L  
 96-hour LC<sub>50</sub> Sheepshead Minnow: greater than 150 mg/L  
 96-hour (shell deposition) EC<sub>50</sub> Eastern Oyster: greater than 110 mg/L  
 96-hour LC<sub>50</sub> Mysid Shrimp: greater than 130 mg/L  
 72-hour EC<sub>50</sub> Algae: 3.7 mg/L

Honeybee 48-hour contact LD<sub>50</sub>: >25 µg/bee.

### OTHER ENVIRONMENTAL INFORMATION:

This product is toxic to non-target plants. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

### 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 3082 Environmentally Hazardous Substance, liquid, N.O.S.  
 (Bispyribac-sodium), 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 3082 Environmentally Hazardous Substance, liquid, N.O.S.  
 (Bispyribac-sodium), 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  
 •For US 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:**

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: NOT AVAILABLE**

**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. 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.

**New Jersey Right To Know**

<b>Name</b>	<b>CAS#</b>
Propylene glycol	57-55-6
Ethylene Oxide	75-21-8
1,4-Diethylene dioxide	123-91-1

**Pennsylvania Right to Know**

<b>Name</b>	<b>CAS#</b>
Propylene glycol	57-55-6
Ethylene Oxide	75-21-8
1,4-Diethylene dioxide	123-91-1

**Massachusetts Right to Know**

<b>Name</b>	<b>CAS#</b>
Ethylene Oxide	75-21-8
1,4-Diethylene dioxide	123-91-1

**Minnesota Right to Know**

<b>Name</b>	<b>CAS#</b>
<b>1,4-Diethylene dioxide</b>	123-91-1

**California Proposition 65**

Chemicals known to cause cancer:

<b>Name</b>	<b>CAS#</b>
Ethylene Oxide	75-21-8
1,4-Diethylene dioxide	123-91-1

Chemicals known to cause birth defects and other reproductive harm

<b>Name</b>	<b>CAS#</b>
Ethylene Oxide	75-21-8

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



**16. OTHER INFORMATION**

**REASON FOR ISSUE:** Changing SDS from experimental to EPA-registered product.  
**SDS NO.:** 0596  
**EPA REGISTRATION NUMBER:** 59639-258  
**REVISION NUMBER:** 0  
**REVISION DATE:** 11/22/2022  
**SUPERCEDES DATE:** 00/00/0000  
**RESPONSIBLE PERSON(S):** Valent U.S.A. LLC, Corporate EH&S, (925) 256-2803

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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