

EZ-JECT®

Safety Data Sheet

1. IDENTIFICATION

PRODUCT: EZ-Ject® Diamondback® Herbicide Shells

EPA Reg. No.: 83220-1

EPA Est: 69117-NE-1

Supplier Information: EZ-Ject, Inc.
10172 L Street
Omaha, NE 68127 USA
Toll Free: 888.395.6732
Phone: 402.339.4459
Fax: 402.339.5011
Email: mike@arborsystems.com
Website: www.ezject.com

Emergency Phone Number: 402.339.4459 (Company)
800.222.1222 (Poison Control)

Recommended Use: Water-soluble herbicide in shells for trunk and stem injection to control undesirable woody brush, trees and vines.

User Restrictions: Do not apply directly to water or inject into stems below the water level.

2. HAZARD(S) IDENTIFICATION



WARNING

EMERGENCY OVERVIEW

Appearance and odor (color/form/odor): Colorless to Yellow / Liquid, (viscous) / Odorless

WARNING: Keep out of reach of children

POTENTIAL HEALTH EFFECTS

Likely routes of exposure: Skin contact, eye contact

Eye contact, short term: Causes moderate eye irritation. Use eye protection splash glasses or goggles.

Skin contact, short term: Not expected to produce significant adverse effects when recommended use instructions are followed.

Refer to Section 11 for toxicological and Section 12 for environmental information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENT:

Glyphosate, N-(phosphonomethyl) glycine, in the form of its
isopropylamine salt (CAS No. 38641-94-0) 83.5%

OTHER INGREDIENTS 16.5%

Total 100.0%

OSHA Status

This product is not hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

4. FIRST-AID MEASURES

If Swallowed: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Safety Data Sheet

Advice to doctors: This product is not an inhibitor of cholinesterase.

Antidote: Treatment with atropine and oximes is not indicated.

5. FIRE-FIGHTING MEASURES

Flash point: Does not flash.

Extinguishing media: Recommended: Water, foam, dry chemical, carbon dioxide (CO₂)

Unusual fire and explosion hazards: Minimize use of water to prevent environmental contamination. Environmental precautions: see section 6.

Hazardous products of combustion: Carbon monoxide (CO), phosphorus oxides (P_xO_y), nitrogen oxides (NO_x)

Fire fighting equipment: Self-contained breathing apparatus.

Equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protection recommended in Section 8.

Environmental precautions: SMALL QUANTITIES: Low environmental hazard.

LARGE QUANTITIES: Minimize spread. Keep out of drains, sewers, ditches and waterways. Notify authorities.

Methods for cleaning up: SMALL QUANTITIES: Flush spill area with water.

LARGE QUANTITIES: Absorb in earth, sand or absorbent material. Dig up heavily contaminated soil. Collect in containers for disposal. Refer to Section 7 for types of containers. Flush residues with small quantities of water. Minimize use of water to prevent environmental contamination. Refer to Section 13 for disposal of spilled material.

7. HANDLING AND STORAGE

Follow good industrial practice in housekeeping and personal hygiene.

Handling: When using, do not eat, drink or smoke. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside, then wash thoroughly and put on clean clothing. Thoroughly clean equipment after use. Do not contaminate drains, sewers and waterways when disposing of equipment rinse water.

Storage: Minimum storage temperature: 32°F (0°C). Maximum storage temperature: 122°F (50°C).

Compatible materials for storage: Stainless steel, aluminum, fiberglass, plastic, glass lining. **Incompatible materials for storage:** Galvanized steel, unlined mild steel, see section 10. Keep out of reach of children. Keep away from food, drink and animal feed. Keep only in the original container. Partial crystallization may occur on prolonged storage below the minimum storage temperature. If frozen, place in warm room and shake frequently to put back into solution. Maximum shelf life: 5 years. Follow all local/regional/national/international regulations.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Airborne exposure limits:

| Components | Exposure Guidelines |
|-----------------------------------|---|
| Isopropylamine salt of glyphosate | No specific occupational exposure limit has been established. |
| Other ingredients | No specific occupational exposure limits have been established. |

Engineering controls: No special requirement when used as recommended.

Eye protection: No special requirement when used as recommended.

Skin protection: For repeated or prolonged contact wear chemical-resistant gloves.

Respiratory protection: No special requirement when used as recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Color/color range: Colorless to Yellow

Form: Liquid (viscous)

Odor: Odorless

Flash point: Does not flash

Specific gravity: 1.23 @ 20°C / 4°C

Vapor pressure: 23.5 mmHg

Solubility: Water: Completely miscible

pH: 4.4 - 4.8 @ 54 g/l

Partition coefficient (log Pow): -3.2 @ 25°C (glyphosate)

Auto-ignition temperature: Not Applicable

Decomposition temperature: Not Applicable

Evaporation rate: Not Applicable

Safety Data Sheet

Flammability (solid/gas): Not Applicable

Freezing point: Not Determined

Initial boiling point/boiling range: Not Determined

Melting point: Not Applicable

Odor threshold: Not Applicable

Upper/lower flammability limits: Not Determined

Upper/lower explosive limits: Not Applicable

Vapor density: Not Applicable

Viscosity: Not Determined

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of handling and storage.

Hazardous decomposition: Thermal decomposition: Hazardous products of combustion: see section 5. When heated, may give off toxic fumes.

Materials to avoid/reactivity: Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

11. TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and other health professionals. Data obtained on products and components are summarized below.

Acute oral toxicity

Rat, LD50 (limit test): Approximately 5,000 mg/kg body weight. FIFRA category III. No mortality.

Acute dermal toxicity

Rabbit, LD50 (limit test): > 5,000 mg/kg body weight. Practically non-toxic. FIFRA category IV. No mortality.

Acute inhalation toxicity

Rat, LC50, 4 hours, aerosol: > 4.24 mg/L. Practically non-toxic. FIFRA category IV. No mortality. Maximum attainable concentration.

Skin irritation

Rabbit, 6 animals, Draize test: Days to heal: 3. Primary Irritation Index (PII): 0.0/8.0. Essentially non-irritating. FIFRA category IV.

Eye irritation

Rabbit, 6 animals, OECD 405 test: Days to heal: 0. FIFRA category IV

Skin sensitization

Guinea pig, Buehler test: Positive incidence: 0 %. N-(phosphonomethyl)glycine; {glyphosate}

Mutagenicity

In vitro and in vivo mutagenicity test(s): Not mutagenic

Repeated dose toxicity

Rabbit, dermal, 21 days: NOEL toxicity: > 5,000 mg/kg body weight/day Target organs/systems: none. Other effects: none

Rat, oral, 3 months: NOEL toxicity: > 20,000 mg/kg diet. Target organs/systems: none. Other effects: none

Chronic effects/carcinogenicity

Mouse, oral, 24 months: NOEL tumor: > 30,000 mg/kg diet. NOEL toxicity: ~ 5,000 mg/kg diet. Tumors: none. Target organs/systems: liver
Other effects: decrease of body weight gain, histopathologic effects

Rat, oral, 24 months: NOEL tumor: > 20,000 mg/kg diet. NOEL toxicity: ~ 8,000 mg/kg diet. Tumors: none. Target organs/systems: eyes

Other effects: decrease of body weight gain, histopathologic effects

Toxicity to reproduction/fertility

Rat, oral, 3 generations: NOEL toxicity: > 30 mg/kg body weight. NOEL reproduction: > 30 mg/kg body weight. Target organs/systems in parents: none. Other effects in parents: none. Target organs/systems in pups: none. Other effects in pups: none

Developmental toxicity/teratogenicity

Rat, oral, 6 - 19 days of gestation: NOEL toxicity: 1,000 mg/kg body weight. NOEL development: 1,000 mg/kg body weight

Safety Data Sheet

Other effects in mother animal: decrease of body weight gain, decrease of survival. Developmental effects: weight loss, post-implantation loss, delayed ossification. Effects on offspring only observed with maternal toxicity

Rabbit, oral, 6 - 27 days of gestation: NOAEL toxicity: 175 mg/kg body weight. NOAEL development: 175 mg/kg body weight

Target organs/systems in mother animal: none. Other effects in mother animal: decrease of survival. Developmental effects: none

12. ECOLOGICAL INFORMATION (NON-MANDATORY)

This section is intended for use by ecotoxicologists and other environmental specialists.

Aquatic toxicity, fish

Bluegill sunfish (*Lepomis macrochirus*): Acute toxicity, 96 hours, static, LC50: > 1,000 mg/L. Practically non-toxic.

Rainbow trout (*Oncorhynchus mykiss*): Acute toxicity, 96 hours, static, LC50: > 1,000 mg/L. Practically non-toxic.

Aquatic toxicity, invertebrates

Water flea (*Daphnia magna*): Acute toxicity, 48 hours, static, EC50: 930 mg/L. Practically non-toxic.

Aquatic toxicity, algae/aquatic plants

Green algae (*Scenedesmus subspicatus*): Acute toxicity, 72 hours, static, ErC50 (growth rate): 166 mg/L. Practically non-toxic.

Soil organism toxicity, invertebrates

Earthworm (*Eisenia foetida*): Acute toxicity, 14 days, LC50: > 5,000 mg/kg dry soil. Practically non-toxic.

N-(phosphonomethyl)glycine; {glyphosate}

Avian toxicity

Bobwhite quail (*Colinus virginianus*): Dietary toxicity, 5 days, LC50: > 4,640 mg/kg diet. No more than slightly toxic.

Mallard duck (*Anas platyrhynchos*): Dietary toxicity, 5 days, LC50: > 4,640 mg/kg diet. No more than slightly toxic.

Bobwhite quail (*Colinus virginianus*): Acute oral toxicity, single dose, LD50: > 3,851 mg/kg body weight. Practically non-toxic.

Arthropod toxicity:

Honey bee (*Apis mellifera*): Oral, 48 hours, LD50: 100 µg/bee

Honey bee (*Apis mellifera*): Contact, 48 hours, LD50: > 100 µg/bee. Practically non-toxic.

Bioaccumulation

Bluegill sunfish (*Lepomis macrochirus*): Whole fish: BCF: < 1. No significant bioaccumulation is expected.

Dissipation

Soil, field: Half life: 2 - 174 days. Koc: 884 - 60,000 L/kg. Adsorbs strongly to soil.

Water, aerobic: Half life: < 7 days

13. DISPOSAL CONSIDERATIONS (NON-MANDATORY)

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide Storage: Keep container closed to prevent spills and contamination. At the end of each use period, remove unused shells from EZ-Ject shell injection system. Replace unused shells in original container and reseal. Store with the open end of the shell pointing up.

Pesticide Disposal: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state and local procedures.

Container Disposal: Non-refillable container; do not reuse or refill this container. Triple rinse (or equivalent) then offer for recycling, if available; otherwise, discard in trash.

For additional product information call 1-888-395-6732

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation. Not hazardous under the applicable DOT, ICAO/IATA, IMO, TDG and Mexican regulations.

Safety Data Sheet

15. REGULATORY INFORMATION (NON-MANDATORY)

TSCA Inventory

Exempt

SARA Title III Rules

Section 311/312 Hazard Categories: Not applicable.

Section 302 Extremely Hazardous Substances: Not applicable.

Section 313 Toxic Chemical(s): Not applicable.

CERCLA Reportable quantity

Not applicable.

EPA FIFRA Statement:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for Safety Data Sheets (SDS) and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

CAUTION: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear long-sleeved shirt and long pants, socks and shoes.

Environmental Hazards

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 when cleaning equipment or disposing of equipment wash waters.

16. OTHER INFORMATION

The information given here is not necessarily exhaustive but is representative of relevant, reliable data.

Follow all local/regional/national/international regulations.

Please consult supplier if further information is needed.

All tests were conducted following EPA guidelines for Good Laboratory Practices (GLP).

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 are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and 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 this product in a manner inconsistent with its labeling.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, EZ-Ject, Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for the purposes prior to use. In no event will EZ-Ject, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR TO THE PRODUCT TO WHICH INFORMATION REFERS.

Revised: 01/10/2023

Previous Revised: 08/23/2022; 05/2014; 09/2011

Diamondback® is a registered trademark of ArborSystems.