

EZ-Ject, Inc.

P.O. Box 34645 • Omaha, NE 68134
Toll Free: 888-395-6732

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: EZ-Ject™ Diamondback Herbicide Shells

EPA Reg. No.: 83220-1

EPA Est: 69117-NE-1

Company Information:

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2. COMPOSITION, INFORMATION ON INGREDIENTS

Active ingredient

Isopropylamine salt of N-(phosphonomethyl)glycine; {Isopropylamine salt of glyphosate}

Component Name	CAS Number	Percent
Isopropylamine salt of glyphosate	38641-94-0	83.5%
Sucrose	57-50-1	<=5.0%
Other ingredients		11.5%

OSHA Status

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

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance and odor (color/form/odor): Whitish / Paste, (in a cartridge shell) / Musky

CAUTION

HARMFUL IF SWALLOWED. CAUSES MODERATE EYE IRRITATION.

POTENTIAL HEALTH EFFECTS

Likely routes of exposure: Skin contact

Eye contact, short term: May cause temporary eye irritation.

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

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

Single ingestion: Harmful if swallowed.

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

4. FIRST AID MEASURES

Call a poison control center or doctor for treatment advice.

Eye contact: 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.

Skin contact: Take off contaminated clothing, wristwatch, jewelry.

Wash affected skin with plenty of water. Wash clothes and clean shoes before re-use.

Inhalation: Move to fresh air.

Ingestion: 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.

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

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: Not applicable.

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), sulphur oxides (SO_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: Keep out of drains, sewers, ditches and waterways. Do NOT contaminate water when disposing of rinse waters.

Methods for cleaning up: Sweep, scoop or vacuum to remove. Dig up heavily contaminated soil. Collect in containers for disposal. Refer to section 7 for types of containers. Wash spill area with detergent and water. Minimize use of water to prevent environmental contamination. Refer to section 13 for disposal of spilled material. Use handling recommendations in section 7 and personal protection recommendations in section 8.

7. HANDLING AND STORAGE

Follow good industrial practice in housekeeping and personal hygiene.

Handling: Do NOT taste or swallow. Avoid contact with eyes, skin and clothing. 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. Refer to section 13 of the safety data sheet for disposal of rinse water. Emptied containers retain vapors and product residue. FOLLOW LABELED WARNINGS EVEN AFTER CONTAINER IS EMPTIED.

Storage: Minimum storage temperature: < 35°C

Maximum storage temperature: 50°C

Minimum shelf life: 4 years

Keep out of reach of children. Keep away from food, drink and animal feed. Keep only in the original container. Store in an upright condition (with open end upwards) to avoid any potential seepage under conditions of high storage temperatures.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Airborne exposure limits:**

Components	Exposure Guidelines
Isopropylamine salt of glyphosate	No specific occupational exposure limit has been established.
Sucrose	TLV (ACGIH): 10 mg/m ³
Other ingredients	No specific occupational exposure limit has been established.

Engineering controls: No special requirement when used as recommended.

Eye protection: No special requirement when used as recommended.

Skin protection: No special requirement when used as recommended.

Respiratory protection: No special requirement when used as recommended.

When recommended, consult manufacturer of personal protective equipment for the appropriate type of equipment for a given application.

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: Whitish

Odor: Musky

Form: Paste, (in a cartridge shell)

Flash point: Not applicable.

Specific gravity: Not applicable.

Vapor pressure: Not applicable.

Density: 41 lb/ft³

Solubility: Water: Completely miscible.

pH: 4.6-10 g/l

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

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of handling and storage.

Oxidizing properties: No data.

Hazardous decomposition: Thermal decomposition: Hazardous products of combustion: see section 5.

Self-accelerating decomposition temperature (SADT): No data.

11. TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and other health professionals.

Data obtained on product and components are summarized below.

Acute oral toxicity

Rat, LD50: 5,000 mg/kg body weight

Slightly toxic.

FIFRA category III.

Acute dermal toxicity

Rabbit, LD50 : > 5,000 mg/kg body weight

Practically non-toxic.

FIFRA category IV.

No mortality.

Skin irritation

Rabbit, 6 animals, OECD 404 test:

Days to heal: 1

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: 3

Slight irritation.

FIFRA category III.

Skin sensitization

Guinea pig, 3-induction 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:

NOAEL toxicity: > 5,000 mg/kg body weight/day

Target organs/systems: none

Other effects: none

Rat, oral, 3 months:

NOAEL toxicity: > 20,000 mg/kg diet

Target organs/systems: none

Other effects: none

Chronic effects/carcinogenicity

Mouse, oral, 24 months:

NOAEL toxicity: ~ 5,000 mg/kg diet

Target organs/systems: liver

Other effects: decrease of body weight gain, histopathologic effects

NOEL tumor: > 30,000 mg/kg diet

Tumors: none

Rat, oral, 24 months:

NOAEL toxicity: ~ 8,000 mg/kg diet

Target organs/systems: eyes

Other effects: decrease of body weight gain, histopathologic effects

NOEL tumor: > 20,000 mg/kg diet

Tumors: none

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Toxicity to reproduction/fertility

Rat, oral, 2 generations:

NOAEL toxicity: 10,000 mg/kg diet

NOAEL reproduction: > 30,000 mg/kg diet

Target organs/systems in parents: none

Other effects in parents: decrease of body weight gain

Target organs/systems in pups: none

Other effects in pups: decrease of body weight gain

Effects on offspring only observed with maternal toxicity.

Developmental toxicity/teratogenicity

Rat, oral, 6 - 19 days of gestation:

NOAEL toxicity: 1,000 mg/kg body weight

NOAEL development: 1,000 mg/kg body weight

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

This section is intended for use by ecotoxicologists and other environmental specialists. Environmental studies on this product have not been conducted. Data obtained on active ingredient(s) are summarized below.

ISOPROPYLAMINE SALT OF GLYPHOSATE (62%)

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, EbC50 (biomass): 72.9 mg/L

Slightly 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

Product Disposal: Keep out of drains, sewers, ditches, and waterways.

Recycle if appropriate facilities/equipment available. Burn in proper incinerator. Follow all local, regional, national, and international regulations.

Container Disposal: See the individual container label for disposal information. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed. Do NOT contaminate water when disposing of rinse waters. Store for collection by approved waste disposal service. Recycle if appropriate facilities/equipment available. Follow all local, regional, national, and international regulations.

Use handling recommendations in section 7 and personal protection recommendations in section 8.

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.

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15. REGULATORY INFORMATION

PCPA registered.

TSCA Inventory

Exempt

OSHA Hazardous Components

Sucrose.

CERCLA Reportable quantity

Not applicable.

16. OTHER INFORMATION

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

Follow all local, regional, national, and international regulations.

Please consult supplier if further information is needed.

Full denomination of most frequently used acronyms. BCF (Bioconcentration Factor), BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand), EC50 (50% effect concentration), I.M. (intramuscular), I.P. (intraperitoneal), I.V. (intravenous), Koc (Soil adsorption coefficient), LC50 (50% lethality concentration), LD50 (50% lethality dose), LDLo (Lower limit of lethal dose), LEL (Lower Explosion Limit), LOAEC (Lowest Observed Adverse Effect Concentration), LOAEL (Lowest Observed Adverse Effect Level), LOEC (Lowest Observed Effect Concentration), LOEL (Lowest Observed Effect Level), MEL (Maximum Exposure Limit), MTD (Maximum Tolerated Dose), NOAEC (No Observed Adverse Effect Concentration), NOAEL (No Observed Adverse Effect Level), NOEC (No Observed Effect Concentration), NOEL (No Observed Effect Level), OEL (Occupational Exposure Limit), PEL (Permissible Exposure Limit), PII (Primary Irritation Index), Pow (Partition coefficient n-octanol/water), S.C. (subcutaneous), STEL (Short-Term Exposure Limit), TLV-C (Threshold Limit Value-Ceiling), TLV-TWA (Threshold Limit Value - Time Weighted Average), UEL (Upper Explosion Limit)

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS 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 product labeling and provincial legislation, 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 a pesticide product in any manner not prescribed on the PMRA-approved label.

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