



P.O. Box 34645 • Omaha, NE 68134 • Toll-Free: 899-698-4641 • Phone: 402-339-4459 • Fax: 402-339-5011 • www.ArborSystems.com

1. IDENTIFICATION

PRODUCT: EZ-Ject™ Copperhead® Herbicide Shells
EPA Reg. No.: 83220-2
EPA Est: 69117-NE-1

2. HAZARD(S) IDENTIFICATION



WARNING

EMERGENCY OVERVIEW:

Potential health hazards:

See Product Label for additional precautionary statements.

Primary routes of exposure: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact.

Acute toxicity: Relatively nontoxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

Irritation: May cause slight but temporary irritation to the eyes. May cause slight irritation to the skin.

Sensitization: Skin sensitizing effects were not observed in animal studies. Repeated dose toxicity: No other known chronic effects.

Aquatic toxicity: There is a high probability that the product is not acutely harmful to fish. There is a high probability that the product is not acutely harmful to aquatic invertebrates. Acutely harmful for aquatic plants.

Terrestrial toxicity: With high probability not acutely harmful to terrestrial organisms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENT:

Isopropylamine salt of Imazapyr

(2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)* 83.5%

OTHER INGREDIENTS 16.5%

Total 100.0%

* Equivalent to 0.008 ounces (0.23 grams) per shell of Isopropylamine salt of Imazapyr or 0.006 ounces (0.18 grams) of Imazapyr Acid.

4. FIRST-AID MEASURES

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

Call a poison control center or doctor for treatment advice.

If in Eyes: 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.

If Swallowed: Immediately call a poison control center or doctor 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.

If on Skin or Clothing: Take off contaminated clothing. Immediately rinse skin with plenty of water for 15-20 minutes.

Note to physician:

Antidote: No known specific antidote.

Treatment: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point: > 210°F

Autoignition: approximately 200°F

Suitable extinguishing media: Foam, dry extinguishing media, Carbon dioxide, water spray.

Hazards during fire-fighting: Carbon monoxide, Carbon dioxide, Nitrogen oxide. If product is heated above decomposition temperature, toxic vapors will be released. The substances/groups of substances mentioned can be released if the product is involved in a fire.

Protective equipment for fire-fighting: Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information: Evacuate area of all unnecessary personnel. Contain contaminated water/fire-fighting water. Do not allow to enter drains or waterways.

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions: Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/fire-fighting water.

Cleanup: Dike spillage: pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. HANDLING AND STORAGE

Handling:

General advice: RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle an open container with care. Do not open until ready to use. Once container is opened, content should be used up as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/ product. Avoid contact with the skin, eyes, and clothing. Avoid inhalation of dusts/mists/vapors. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion: The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, and open flame. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Storage:

General advice: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage incompatibility: General: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Advice on system design: Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment:

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection: Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapors. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH certified full face piece pressure demand self-contained breathing apparatus (SCBA) or a full face piece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection: Chemical resistant protective gloves. Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection: Safety glasses with side-shields (frame goggles) (f.e. EN 166)

Body protection: Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures: Wear long-sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Crystals/solid

Odor: Strong, ammonia-like

Color: Green

pH value: 5.5 - 7.5

Boiling point: Approximately 212°F (760 mmHg)

Density: 1.11 - 1.12 g/cm³

10. STABILITY AND REACTIVITY

Conditions to avoid: Avoid all sources of ignition: heat, sparks, and open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electrostatic discharge. Avoid prolonged storage.

Substances to avoid: Oxidizing agents, strong alkalis.

Hazardous reactions: This product is chemically stable. Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

Decomposition products: Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated. Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition: Possible thermal decomposition products: carbon monoxide, carbon dioxide, Nitrogen oxide. Stable at ambient temperature. If product is heated above decomposition temperature, toxic vapors may be released. If product is heated above decomposition temperatures, hazardous fumes may be released.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral: LD₅₀/rat: > 5,000 mg/kg. Slightly toxic to practically nontoxic.

Inhalation: LC₅₀/rat/male/female: 4.62 mg/L/4h

Dermal: LD₅₀/rabbit: > 5,000 mg/kg. Slightly toxic.

Skin irritation: Rabbit: Mildly irritating. (Primary skin irritation test)

Eye irritation: Rabbit: Nonirritating.

Genetic toxicity: Information on: imazapyr - No mutagenic effect was found in various tests with microorganisms and mammals.

Carcinogenicity: Information on: imazapyr -In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity: Information on: imazapyr - The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity/teratogenicity: Information on: imazapyr - No indications of a developmental toxic/teratogenic effect were seen in animal studies.

12. ECOLOGICAL INFORMATION (NON-MANDATORY)

Information on: imazapyr

Environmental toxicity:

Acute and prolonged toxicity to fish: Rainbow trout/LC₅₀ (96 h): > 100 mg/L

Acute toxicity to aquatic invertebrates: Daphnia magna/EC₅₀ (48 h): > 100 mg/L

Toxicity to aquatic plants: Green algae/EC₅₀: 71 mg/L

Other terrestrial non-mammals: Mallard duck/LC₅₀: > 5,000 ppm.

With high probability, not acutely harmful to terrestrial organisms.

Honey bee/LD₅₀: > 100 ug/bee

With high probability, not acutely harmful to terrestrial organisms.

Other ecotoxicological advice: Do not discharge product into the environment without control. No data available for the preparation. The ecological data given are those of the active ingredient.

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food, 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 the EZ-Ject injection system. Replace unused shells in original container and reseal. Always store the product with the open end of the capsule facing UP.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on-site by using according to "Directions for Use" on this label, or at an approved waste disposal facility.

Container Disposal: Non-refillable container; do not reuse or refill container. Offer for recycling if available; alternatively, dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

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.

15. REGULATORY INFORMATION

Federal Regulations:

FIFRA Information: Signal Word: Caution

Precautionary Statements: Harmful if swallowed.

Registration status:

TSCA, US: released/exempt

OSHA Hazard Category: Chronic target organ effects reported, Acute target organ effects reported, ACGIH TLV established, Toxic – inhalation

SARA Hazard Categories: (EPCRA 311/312): Acute

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 OECD 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: 07/2015

Previous Revised: 05/2014

Copperhead® is a registered trademark of EZ-Ject.