

河北捷润科技有限公司

Hebei JRain Technology Co., Ltd.

Date: Oct.10th, 2024

MATERIAL SAFETY DATA SHEET

IMAZAMOX 97%TC

1. Product and Company Identification

Use: crop protection product, herbicide

Company/Undertaking : HEBEI JRRAIN TECHNOLOGY CO.,LTD.

Address : No. 66 XIANGTAI ROAD, YUHUA DISTRICT, SHIJIAZHUANG CITY,
HEBEI PROVINCE, CHINA
Tel : 0086-311-80680379

Fax: 0086-311-80680380

E-mail address of competent person for safety data sheet: sales@king-rain.com.cn

Molecular formula: C₁₅ H₁₉ N₃ O₄

Chemical family: imidazole derivative

Synonyms: imazethapyr ; imazamox

2. Hazards Identification

Emergency overview

WARNING: Contains the allergen sulfite(s).

Causes eye irritation: CAUSES SKIN IRRITATION.

May cause eye damage.

KEEP OUT OF REACH OF CHILDREN.

State of matter: solid

Colour: off-white to tan

Odour: odourless

Potential health effects

Acute toxicity: Harmful if swallowed.

Irritation / corrosion:

May cause slight irritation to the eyes. May cause slight irritation to the respiratory tract.

Prolonged contact with the product can result in skin irritation.

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Potential environmental effects

Degradation / environmental fate: Not readily biodegradable (by OECD criteria).

3. Composition / Information on Ingredients

Not WHMIS controlled.

4. First-Aid Measures

If inhaled:

Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

If on skin:

Wash affected areas thoroughly with soap and water. Remove contaminated clothing.

If irritation develops, seek medical attention.

If in eyes:

Hold eyelids open to facilitate rinsing. Flush with copious amounts of water for at least 15 minutes. If symptoms persist, seek medical advice.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

5. Fire-Fighting Measures

Flash point: not applicable

Autoignition: not applicable

Self-ignition temperature: not self-igniting

Suitable extinguishing media:

foam, dry powder, carbon dioxide, water spray

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrocarbons,

If product is heated above decomposition temperature, toxic vapours will be released.

The substances/groups of

substances mentioned can be released if the product is involved in a fire.

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Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

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/firefighting 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:

Ensure adequate ventilation. 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 and open container with care. Avoid dust formation. Provide means for controlling leaks and spills. Avoid contact with the skin, eyes and clothing. Avoid

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inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

Dust can form an explosive mixture with air.

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.

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

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 vapours. 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 facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves

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Eye protection:

Tightly fitting safety goggles (chemical goggles).

General safety and hygiene measures:

Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form: granules

Odour: odourless

Colour: off-white to tan

pH value: 2.9

Melting point: 164 - 165 °C

Boiling point: The product is a non-volatile solid., not applicable

Vapour pressure: negligible

Bulk density: 529 - 609 kg/m³

Solubility in water: (20 °C) dispersible

10. Stability and Reactivity

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures.

Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage. This product may form an explosive mixture if:

1. the dust is suspended in the atmosphere as a dust cloud AND
2. The concentration of the dust is above the lower explosion limit (LEL) AND
3. the limiting oxygen concentration (LOC) is exceeded.

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.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties: not fire-propagating Not an oxidizer.

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11. Toxicological information

Acute toxicity

Oral:

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg

Inhalation:

Type of value: LC50

Species: rat

Value: > 27.2 mg/l

Exposure time: 1 h

Dermal:

Type of value: LD50

Species: rat

Value: > 4,000 mg/kg

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

Irritation / corrosion

Skin:

Species: rabbit

Result: non-irritant

Method: Primary skin irritation test

Eye:

Species: rabbit

Result: non-irritant

Sensitization:

Skin sensitization test

Species: guinea pig

Skin sensitizing effects were not observed in animal studies.

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Repeated dose toxicity

Information on: crystalline silica

Assessment of repeated dose toxicity:

This product may contain greater than 0.1% crystalline silica. Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses.

Genetic toxicity

Information on: imazamox

No mutagenic effect was found in various tests with microorganisms and mammals.

Carcinogenicity

Information on: imazamox

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: imazamox

The results of animal studies gave no indication of a fertility impairing effect.

Development:

Information on: imazamox

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

12. Ecological Information

Fish

Information on: imazamox

Acute: *Oncorhynchus mykiss*/LC50 (96 h): = > 122 ppm

Acute: OPP 72-1 (EPA-Guideline) static

Oncorhynchus mykiss/LC50 (96 h): 340 mg/l

Aquatic invertebrates

Information on: imazamox

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Acute:

Daphnia magna/EC50: >122 ppm

Aquatic plants

Information on: imazamox

Toxicity to aquatic plants:

algae/EC50 (120 h): > 0.037 mg/l

Non-Mammals

Information on: imazamox

Other terrestrial non-mammals:

mallard duck/LC50: > 5,572 ppm

Honey bee/LD50: > 100 ug/bee

Degradability / Persistence

Biological / Abiological Degradation

Evaluation: Not readily biodegradable (by OECD criteria).

Bioaccumulation

Information on: imazamox; PCP# 25109

Bioconcentration factor < 1

13. Disposal considerations

Waste disposal of substance:

See product label for disposal and recycling instructions.

14. Transport Information

Class: 9

UN NO.: 3077

Packing group: III

15. Regulatory Information

Federal Regulations

Registration status:

Chemical DSL, CA released; restriction on quantity / not listed

Crop Protection DSL, CA released / exempt

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WHMIS does not apply to this product.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

16. Other Information

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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