

1. IDENTIFICATION OF THE SUBSTANCE AND THE SUPPLIER

Product name:	Imazamox 33G/L + Imazapyr 15G/L SL
Other name:	1
Recommended use of the chemical	Herbicide
and restrictions on use	
Supplier name:	Shandong Weifang Rainbow Chemical Co., Ltd.
Supplier address:	Binhai Economic Development Area, Weifang, Shandong, China
Supplier phone:	+86-531-88875222, 88875231
Supplier fax:	+86-531-88875232, 88875224
Emergency phone number:	+86-531-88875222

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Acute oral toxicity (Category 5)

Acute dermal toxicity (Category 5)

Acute inhalation toxicity (Category 5)

Eye irritation (category 2B)

Hazardous to the aquatic environment, (acute) (category 3)

GHS Label elements, including precautionary statements:

Not required.

Signal word:

Warning

Hazard statements:

H303: May be harmful if swallowed

H313: May be harmful in contact with skin

H333: May be harmful if inhaled

H320: Causes eye irritation

H402: Harmful to aquatic life

Precautionary statements:

P264 + P265 Wash hands [and...] thoroughly after handling. Do not touch eyes.

P273 Avoid release to the environment.

P301+ P317 IF SWALLOWED: Get medical help.

P302 + P317 IF ON SKIN: Get medical help.

P304 + P317 IF INHALED: Get medical help.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P317 If eye irritation persists: Get medical help.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification:

No data available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name

CAS No.

Concentration



Imazamox	114311-32-9	33G/L
Imazapyr	81334-34-1	15G/L
Other ingredients	/	Up to 1L

4. FIRST AID MEASURES

Description of necessary first aid measures

Ingestion: Do not give anything by mouth to a semi-conscious or unconscious person. Do not induce vomiting. Wash out mouth thoroughly with water. Make every effort to prevent vomit from entering the lungs by careful placement of the patient. If symptoms develop seek medical attention.

Inhalation: Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.

Skin contact: Remove contaminated clothing and launder before re-use. Wash affected areas thoroughly with soap and water.

Eye contact: Hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical attention if necessary.

Advice to doctors: Treat symptomatically.

Antidote: A specific antidote against this substance is not known.

Most important symptoms/effects, acute and delayed

Eye contact may cause result in irritation.

Indication of immediate medical attention and special treatment needed:

Immediate medical attention is required in case of ingestion of a large quantity of the product. It may be helpful to show this safety data sheet to physician.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Extinguish fires with water spray, water fog, carbon dioxide, foam, dry extinguishing agent.

Special hazards arising from the chemical:

Carbon dioxide, Nitrogen oxides

Special protective actions for fire-fighters:

Remove spectators from surrounding area. Remove container from fire area if possible. Keep upwind. Wear self-contained breathing apparatus and chemical-protective clothing. Use a recommended extinguishing agent for the type of surrounding fire. Fire residues and contaminated fire extinguishing agents must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Evacuate all unprotected personnel. Wear full protective clothing to prevent exposure. Avoid contact with skin, eyes and clothing. Remove contaminated clothes, undergarments and shoes.

Environmental precautions:

Do not allow entering of drains or watercourses. Do not allow to enter into soil.

Methods and materials for containment and cleaning up:

Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in suitable containers for disposal (separately). Dispose of waste according to the applicable local and national regulations.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handle product with caution. Wash hands before eating, drinking, chewing gum, smoking or using the toilet. Operators should change and wash clothing after use. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Conditions for safe storage, including any incompatibilities:

Store in its original, labelled and closed container in dry, cool, shaded, well-ventilated area. Keep away from oxidizers and prolonged periods in direct sunlight. Keep out of reach of unauthorized persons, children and animals. Local regulations should be complied with.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:

Handle in well ventilated areas, generally natural ventilation is adequate.

Personal protective equipment:

Respirator: Handle in well ventilated areas, generally natural ventilation is adequate.

Clothing: Wear suitable personal protective equipment. Wear cotton overalls buttoned to the neck and wrist and a washable hat.

Gloves: Suitable chemical resistant gloves.

Eye protection: Wear safety goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color etc.):	Pale-yellow Liquid
Odor:	Faint odor
Odor threshold:	No data available.
pH:	6.0-8.0
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	approx. 100 °C
Flash point:	Non-flammable
Evaporation rate:	No data available.
Flammability (solid, gas):	Not highly flammable
Upper/lower flammability or explosive limits:	Not applicable
Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	1.06-1.08 g/ml 20°C
Solubility(ies):	Soluble
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	398 °C
Decomposition temperature:	No data available.
Viscosity:	approx. 83 mPa⋅s at 20°C

10. STABILITY AND REACTIVITY

Reactivity:

This product is unlikely to react or decompose under normal storage conditions. **Chemical stability:**

Rainbow all about growing

Stable at normal temperatures and storage conditions.

Possibility of hazardous reactions:

No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid:

Extremes of temperature and prolong direct sunlight.

Incompatible materials:

Strong oxidizers and deoxidizers. Corrosion to iron and mild steel.

Hazardous decomposition products:

No hazardous decomposition when stored and handled according to prescribed instructions.

11. TOXICOLOGICAL INFORMATION

Acute health effects:

The substance is not expected to be harmful by inhalation, in contact with skin or if swallowed.

Numerical measures of toxicity:

Acute oral LD50:	5000mg/kg in the rat
Acute dermal LD50:	> 2000mg/kg in the rat
Acute inhalation LC50:	> 6.88mg/L in the rat
Skin irritation	No irritation (rabbit)
Eye irritation	Mild irritation (rabbit)
Skin sensitization	No sensitization

Chronic health effects:

Carcinogenicity: The results of various animal studies gave no indication of a carcinogenic effect. Reproductive toxicity: The results of animal studies gave no indication of a fertility impairing effect. Developmental toxicity: Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish - 96hour LC50	4540 mg/L (Poecillia reticulata)
Algae – Acute 72h Growth rate: E_rC_{50}	14.4 mg/L (Chlorella vulgaris)
Aquatic invertebrate –Acute 48 hours EC_{50}	2878 mg/L (Daphnia magna)
Birds - Acute LD ₅₀	>2904.39 mg/kg (Japanese quail)
Bee - Acute contact LD ₅₀	>22.9506 µg/bee(Honeybee)
Bee - Acute oral LD ₅₀	>23.2339 µg/bee(Honeybee)
Earthworms - Acute 14 days LC_{50}	208.75 mg/kg
Soil microorganism	Not have a negative impact

Persistence and degradability:

The statement has been derived from the properties of the individual components:

Imazamox: Not readily biodegradable (by OECD criteria).

Imazapyr: Not readily biodegradable (by OECD criteria).

Bioaccumulative potential:

The statement has been derived from the properties of the individual components:

Imazamox: Bioconcentration factor: < 1, Lepomis macrochirus (OECD-Guideline 305). Does not accumulate in organisms.



Imazapyr: Bioconcentration factor: < 1.0, Lepomis macrochirus. Does not accumulate in organisms.

Mobility in the soil:

The statement has been derived from the properties of the individual components:

Imazamox: Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Imazapyr: Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Other adverse effects:

No data available.

13. DISPOSAL CONSIDERATIONS

Safe handling of waste residues and disposal methods:

Product disposal:

Wastes resulting from the use of this product must be disposed of in an approved incinerator or waste treatment/disposal facility in accordance with applicable regulations.

Container disposal:

Triple rinse empty containers before disposal. Do not re-use the empty container for any other purpose. Prevent contamination of food, feedstuff, drinking water and eating utensils. Comply with local legislation applying to waste disposal.

14. TRANSPORT INFORMATION

UN Number: 3082 Road Transport ADR/IRD: Class:9 Packaging group: III UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID.N.O.S

Maritime Transport IMDG/IMO:

Class:9 Packaging group: III UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID.N.O.S **Marine Pollutant (Y/N)**: Yes

Air transport IATA/ICAO:

Class:9 Packaging group: III UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID.N.O.S

Special/Environmental Precautions: None known.

15. REGULATORY INFORMATION

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.

Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with local laws.



16. OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

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