

1. IDENTIFICATION OF THE SUBSTANCE AND THE SUPPLIER

Product name: 2,4-D 2-Ethylhexyl Ester 452.42G/L + Florasulam 6.25G/L SE

Other name:

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 toxicity - Oral (Category 5)

Acute toxicity - Dermal (Category 5)

Acute toxicity - Inhalation (Category 5)

Acute toxicity – Eye irritation (Category 2B)

Acute toxicity – Skin sensitization (Category 1B)

Hazardous to the aquatic environment — Acute Hazard (Category 1)

GHS Label elements, including precautionary statements:





Signal word: Warning Hazard statements:

H303: May be harmful if swallowed.

H313: May be harmful in contact with skin.

H317: May cause an allergic skin reaction.

H320: Causes eye irritation.

H333: May be harmful if inhaled.

H400: Very toxic to aquatic life.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P301+ P317 IF SWALLOWED: Get medical help.

P302 + P317 IF ON SKIN: Get medical help.

P302 + P352 IF ON SKIN: Wash with plenty of water.

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.



P321 Specific treatment.

P333 + P317 If skin irritation or rash occurs: Get medical help.

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

P362 + P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

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

Other hazards which do not result in classification:

Not available

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration
2,4-D 2-Ethylhexyl Ester	1928-43-4	452.42G/L
Florasulam	145701-23-1	6.25G/L
Other ingredients	1	Up to 1L

4. FIRST AID MEASURES

Description of necessary first aid measures

INHALATION: Move person to fresh air. If person is not breathing, call an emergency responder or

ambulance, then give artificial respiration. Call a doctor for treatment advice.

SKIN CONTACT: Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20

minutes. Call a doctor for treatment advice.

EYE CONTACT: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove

contact lenses, if present, after the first 5 minutes, and then continue rinsing eyes.

Call a doctor for treatment advice

INGECTION: Call a doctor immediately 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 doctor.

NOTES TO DOCTOR: No specific antidote.

Most important symptoms/effects, acute and delayed

Not available

Indication of immediate medical attention and special treatment needed:

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Water fog, carbon dioxide, dry chemical or foam.

Special hazards arising from the chemical:

This material will not burn until the water has evaporated. Residue can burn.

Special protective actions for fire-fighters:

Wear positive-pressure self-contained breathing apparatus and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during firefighting operations. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

6. ACCIDENTAL RELEASE MEASURES



Personal precautions, protective equipment and emergency procedures:

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions:

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent. Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Do not swallow. Keep out of reach of children. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities:

Store in a dry place. Store in original container. Keep container tightly closed. Do not store near food, foodstuffs, drugs or potable water supplies.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:

General (mechanical) room ventilation is considered satisfactory.

Personal protective equipment:

Eye protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

Skin protection: PVC-coated gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn. Change to clean clothing if contaminated.

Respiratory protection: Transfer or mix with adequate ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color etc.): Off-white to white Liquid

Odor: No data available
Odor threshold: No data available

pH: 4.0-7.0

Melting point/freezing point:No data availableInitial boiling point and boiling range:No data available

Flash point: >100°C

Evaporation rate:

Flammability (solid, gas):

Upper/lower flammability or explosive limits:

Vapor pressure:

No data available

No data available

No data available

No data available



Relative density: 1.17 g/cm³ **Solubility(ies):** Emulsifiable

Partition coefficient: n-octanol/water:

Auto-ignition temperature:

No data available

No data available

No data available

No data available

Viscosity:

No data available

10. STABILITY AND REACTIVITY

Reactivity:

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

Chemical stability:

Stable under normal conditions.

Possibility of hazardous reactions:

No dangerous reaction in appropriate storage and usage.

Conditions to avoid:

Extreme degrees and direct sunlight.

Incompatible materials:

Avoid strong acid/alkaline formulations and oxidizers.

Hazardous decomposition products:

This will not occur.

11. TOXICOLOGICAL INFORMATION

Acute health effects:

Eye irritation Mildly irritant
Skin irritation No irritant

Sensitization Cause sensitizer

Numerical measures of toxicity:

Acute oral LD₅₀: 2500mg/kg Acute dermal LD₅₀: >2000mg/kg

Acute inhalation LC₅₀: 5.476 mg/L in the rat

Chronic health effects:

Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish - 96 hour LC $_{50}$ >100 mg/L Daphnia - 48 hour EC $_{50}$ >100 mg/L Algae - 72 hour EC $_{50}$ 0.40 mg/L Birds - Acute LD $_{50}$ >2000 mg/kg Honeybee - Acute oral LD $_{50}$ >100 μ g/bee Earthworm - Acute LD $_{50}$ >1000 mg/kg

Persistence and degradability:

Not available

Bioaccumulative potential:

Does not bioaccumulate.



Mobility in the soil:

Not available

Other adverse effects:

Not available

13. DISPOSAL CONSIDERATIONS

Safe handling of waste residues and disposal methods:

PRODUCT DISPOSAL

Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

CONTAINER DISPOSAL

Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

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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