

1. IDENTIFICATION OF THE SUBSTANCE AND THE SUPPLIER

Product name: S-metolachlor 312.5G/L + Terbuthylazine 187.5G/L SC

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 4)

Eye irritation (category 2B)

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

Hazardous to the aquatic environment — Chronic 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.

H332 Harmful if inhaled.H320 Causes eye irritation.H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Precautionary statements:

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

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

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P301+ P317 IF SWALLOWED: Get medical help.

P302 + P317 IF ON SKIN: Get medical help.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P317 Get medical help.



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

P391 Collect spillage.

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
S-metolachlor	87392-12-9	312.5G/L
Terbuthylazine	5915-41-3	187.5G/L
Other ingredients	1	Up to 1L

4. FIRST AID MEASURES

Description of necessary first aid measures

Ingestion: Do not induce vomiting. Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a doctor immediately.

Inhalation: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician immediately.

Skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a doctor. Wash contaminated clothing before re-use.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Advice to doctors: Treat symptomatically.

Antidote: There is no specific antidote available.

Most important symptoms/effects, acute and delayed

No data available

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:

Small fires Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Large fires Alcohol-resistant foam or Water spray. Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the chemical:

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion, including carbon dioxide; carbon monoxide; nitrogen oxides; hydrogen chloride.

Special protective actions for fire-fighters:

Wear protective clothing and self-contained breathing apparatus. Do not allow run-off from fire-fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective clothing and equipment. Avoid contact with the skin, eyes and clothing. Remove



contaminated clothes, undergarments and shoes immediately.

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 local officials.

Methods and materials for containment and cleaning up:

Do not touch spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals. Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind.

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. When use the product, wear safety glasses with side-shields (frame goggles) and suitable protective clothing and gloves. When using, do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities:

DO NOT store with food, seed, or animal feedstuff. Keep out of reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place out of direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. Where necessary, seek additional occupational hygiene advice.

Personal protective equipment:

Eye protection: Use chemical resistant goggles or face shield.

Skin protection: Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment.

Respiratory protection: An approved full-face respirator suitable for protection from spray or mists of pesticides is required. Limitations of respirator use specified by the approved agency and the manufacturer must be observed.

Hand protection: Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Odor: Odourless

Odor threshold: No data available

pH: 4.0-8.0

Melting point/freezing point: No data available



Initial boiling point and boiling range: 100°C at 1,013.25 hPa
Flash point: No data available
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: 1.06-1.10 g/ml at 20°C Solubility(ies): Dispersed in water Partition coefficient: n-octanol/water: No data available No data available **Auto-ignition temperature:** No data available **Decomposition temperature:** No data available Viscosity:

10. STABILITY AND REACTIVITY

Reactivity:

This product is unlikely to react or decompose under normal storage conditions.

Chemical stability:

Stable under normal 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:

Not available

Hazardous decomposition products:

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

11. TOXICOLOGICAL INFORMATION

Acute health effects:

Skin irritation No irritation to rabbits

Eye irritation Mild irritation to rabbits

Skin sensitisation Non-sensitizer.

Numerical measures of toxicity:

Acute oral LD50: 2000-5000mg/kg in the rat

Acute dermal LD50: > 2000mg/kg in the rat

Acute inhalation LC50: >4.21mg/L in the rat for 4h

Chronic health effects:

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

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish - 96 hour LC₅₀ 3.5571mg/L (Poecillia reticulata Peters)

Daphnia – 48 hour EC₅₀ 3.1724mg/L (Daphnia magna)
Daphnia – NOEC 0.3mg/L (Daphnia magna)



Algae – 72 hour EC₅₀

O.083 mg/L (Pseudokirchneriella subcapitata)

Algae – NOEC

O.01 mg/L (Pseudokirchneriella subcapitata)

Bird - Acute LD₅₀

5628.17± 137.32mg/kg (Coturnix japonica)

Bees - 48h contact acute LD₅₀ 93.4417 μ g/bee (honeybee) Bees - 48h oral oral LD₅₀ 93.3727 μ g/bee (honeybee)

Earthworms - Acute 14 days LC₅₀ 233.7 ± 0.1 mg/kg

Soil microorganism Not have a negative impact

Persistence and degradability:

Not easy biodegradation.

Bioaccumulative potential:

Does not bioaccumulate.

Mobility in the soil:

No data available

Other adverse effects:

No data 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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