JIANGSU FENGDENG PESTICIDE FACTORY

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

* PRODUCT NAME: Flutriafol 12.5% SC

* ADDRESS/ PHONE NO.: Jiangsu Fengdeng Pesticide factory

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2. COMPOSITION/INFORMATION ON INGREDIENT

substance	CAS Number	% content
Flutirafol	76674-21-0	12.5%
Other ingredients not to be hazardous	-	87.5%

* PRODUCT DESCRIPTION: Fungicide

* C.A. NAME: (\pm) - α -(2-fluorophenyl)- α -(4-fluorophenyl)-1H-1,2,4-triazole-1-ethanol

3. HAZARDS IDENTIFICATION

Classification:

* Hazard classification: Non-hazardous substance. Non-dangerous goods.

* TOXICITY CLASS: IV * SIGNAL WORD: Harmful

4. FIRST-AID MEASURES

GET MEDICAL AID.

- * SKIN CONTACT: Wash with soap and plenty water thoroughly.
- * EYE CONTACT: Flush immediately with plenty of water for 15 min, at least.
- * INGESTION: contact a doctor at once and induce vomiting under the advice by doctor if necessary.
- * FURTHER MEDICAL TREATMENT: Get medical aid if necessary.

5. FIRE-FIGHTING PROTECTIVE EQUIPMENT

- * EXTINGUISHING MEDIA: Foam, carbon dioxide and chemicals.
- * FIRE FIGHTING PROTECTIVE EQUIPMENT: Wear self-contained, positive pressure breathing apparatus and full fighting protective clothing

6. ACCIDENTAL RELEASE MEASURES

- * SPILLAGE: If spilled during storage or handling, sweep up spillage, or for liquid formulations absorb with sand or other inert absorbent. Remove personal protective equipment immediately after handling product. Wash the outside of gloves before removing. As soon as possible, wash body thoroughly and change into clean clothing. Dispose of spillage according to label instructions.
- * UNCONTROLLED DISCHARGE: In case of large spill, call poison control center for advice.

7. HANDLING AND STORAGE

- * HANDLING: Read the label before use. Avoid contact by mouth and with skin, eyes and clothes; do not breath dust or vapor; when using do not eat, drink or smoke; wash hands and face with soap before eating and drinking; wear respirator, chemical goggles, rubber gloves and impervious protective clothing.
- * STORAGE: Stored it in original container only, keep away from fertilizer, food and feed; do not contaminate water, food, feed during storage and disposal; stored it in a dry ventilated well warehouse.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTIVE CLOTHING: Normal precautions when handling and applying. No special clothing required.

9. PHYSICAL AND CHEMICAL PROPERTIES

* FORM: Homogeneous liquid

* MELTING POINT: Not applicable

* VAPOR PRESSURE: Not applicable

* FLASH POINT: Not applicable

* FLAMMABILITY: Non-flammable

* SOLUBILITY (A.I.): In water 130 mg/l (pH 7, 20 °C). In acetone 190, dichloromethane 150, methanol 69, xylene 12, hexane 0.3 (all in g/l, 20 °C).

10. STABILITY AND REACTIVITY

* STABLE: YES

* CONDISITONS TO AVOID: NONE

* HAZARDOUS POLYMERIZATION: NO

* POLYMERIZATION: Will not occur.

* HAZARDOUS DECOMPOSITION PRODUCTS: High temperatures of fire may produce irritating gases & vapors.

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Acute Oral LD50 (rat): > 2,000 mg/kg b.w. Acute Dermal LD50 (rat): > 2,000 mg/kg b.w. Acute inhalation LC50 (rat): >1.66 mg/l

Skin irritation: Non-irritant (rabbit). Not a skin sensitizer (guinea pig).

Eye irritation: Non-irritant (rabbit). Skin sensitization: Non- sensitizer

Chronic toxicity:

NOEL 20 mg/kg (rats) and 5 mg/kg dogs in 90 day feeding trials.

Evidence from animal tests indicate that repeated or prolonged exposure to flutriafol can result in embryo/foetotoxic effects and liver disorders.

Studies of flutriafol in animals have shown that repeated doses don't produce carcinogenic effects.

Chronic studies in animals have shown that repeated doses primarily attack the liver.

Studies in animals have shown that repeated doses produce embryo/foetotoxic effects (not teratogenic).

ADI (Acceptable Daily Intake) for humans is 0.01 mg/kg bw/day.

12. ECOLOGICAL INFORMATION (ACTIVE INGREDIENT)

Avoid contaminating waterways for FLUTRIAFOL.

Environmental fate, persistence and degradation:

Flutriafol is rapidly and completely degraded by microbial degradation in soil and water.

The half life in soil is 1.5 days and in water 1-4 days.

Aquatic toxicity:

Harmful to aquatic organisms. Risk of bioaccumulation in an aquatic species is low.

Log Octanol/Water Partition Coefficient: 2.3

48hr LC50 (Daphnia magna): 78 mg/L. 96hr LC50 (rainbow trout): 61 mg/L.

Terrestrial toxicity: Harmless to terrestrial species. Low toxicity to bees.

Oral LD50 (mallard duck): >5,000 mg/kg (females).

Oral LD50 (ug/bee): >5 ug/bee.

13. DISPOSAL CONSIDERATIONS

Large amounts should be incinerated at high temperature in a unit with effluent gas scubbing. When no incinerator is available, bury in an approved dump, or in an area where there is no risk of contamination of surface or groundwater. Before burying, liberally mix with sodium carbonate crystals, to help neutralize the product, and with soil rich in organic matter. Comply with any local legislation.

14. TRANSPORT INFORMATION

<u>UN Number:</u> None allocated Road and Rail Transport

Not classified as Dangerous Goods for transport by road and rail.

Marine Transport

Not classified as Dangerous Goods by the criteria of the international Maritime Dangerous Goods Code (IMDG) for transport by sea.

Air Transport

Not classified as Dangerous Goods by the criteria of the international Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

Classification: Based on available information, not classified as hazardous according to criteria of NOHSC.

Poisons Schedule: S6 poison.

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 product in terms of its safety requirements. The data does not signify and warranty with regard to the product's properties.