

## 1: IDENTIFICATION

|                              |                                                                                                                                                                                   |               |                                                                         |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------|
| <b>Chemical Name</b>         | [2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl] 3,3-dimethylbutanoate                                                                                              |               |                                                                         |
| <b>Synonyms</b>              | Spiromesifen 22.90% SC                                                                                                                                                            |               | <b>Trade Name</b> SIKANDER                                              |
| <b>Uses</b>                  | Insecticide                                                                                                                                                                       |               | <b>Molecular Formula</b> C <sub>23</sub> H <sub>30</sub> O <sub>4</sub> |
| <b>Manufacturer/Supplier</b> | Ulink AgriTech Pvt. Ltd.<br>Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri, Pune - 411014, Maharashtra |               |                                                                         |
| <b>Emergency Contact</b>     | 9503095030                                                                                                                                                                        | <b>E-mail</b> | <a href="mailto:info@agrostar.in">info@agrostar.in</a>                  |

## 2: COMPOSITION/INFORMATION OF INGREDIENTS

| Chemical Name     | CAS #        | Percent or Content (w/w) |
|-------------------|--------------|--------------------------|
| Spiromesifen A.I  | 283594-90-01 | 22.90%                   |
| Other Ingredients | -            | 77.10%                   |

## 3: HAZARD IDENTIFICATION

|                                  |                                                                                             |
|----------------------------------|---------------------------------------------------------------------------------------------|
| <b>Physical/Chemical Hazard:</b> | Data available does not support any physical/chemical hazard                                |
| <b>Human Health Hazard:</b>      | This product is not classified as harmful.                                                  |
| <b>Environmental Hazard:</b>     | Very toxic to aquatic organisms, may cause long term adverse effects in aquatic environment |

## 4: FIRST AID MEASURES

**General:** Remove victim from polluted area. Place in the recovery position. Remove contaminated clothing. Dispose in a safe manner.

**Inhalation:** Remove victim to fresh air. Keep the victim warm. Allow victim to rest. Immediately get medical attention.

**Ingestion:** Rinse mouth. Do not induce vomiting. Seek medical attention immediately.

**Skin Contact:** Change contaminated clothing immediately.

**Eye Contact:** Rinse immediately with plenty of water. After 5 minutes remove contact lenses if present. Rinse again with plenty of water. Continue to rinse with eyelid wide open for at least 15 minutes. Seek medical attention if irritation develops.

**Note to Physician:** Treat symptomatically. If a larger quantity swallowed: Gastric lavage may be effective when performed within 2 hours after ingestion. However, the application of activated charcoal and sodium sulfate is always advisable.

## 5: FIRE FIGHTING MEASURES

**Extinguishing Media:** Water. Alcohol resistant foam. Dry chemical powder. Carbon Dioxide

**Unsuitable Extinguishing Media:** Not known.

**Hazardous Thermal (de)composition:** Harmful and toxic vapours/gasses

**Special Procedures:** Do not discharge extinguishing water into the environment. Move containers away from area if it can be done without risk. If possible remove containers from fire zone, cool them with water spray

**Protection of Fire Fighters:** Wear a self contained breathing apparatus. Wear suitable protective gloves and eye/face protection.

## 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with spilled products or contaminated surfaces. Do not eat, drink or smoke.

**Environmental Precaution:** Prevent entry to sewers and public waters. Notify the authorities if product enters sewers or public waters.

**Methods for Cleaning up:** Clean up any spills as soon as possible, using an absorbent material to collect it. Collect spilled material in sealed containers. Remove according to national or local legislation clean the polluted area. Do not dump into the sewer, On the ground or into any body of water.

## 7: HANDLING & STORAGE

**After Spillage and/or Leakage:** Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13. check also the local procedure.

**Handling:** Use only in areas provided with appropriate exhaust ventilation. Handle in accordance with good industrial hygiene and safety practise. For personal protection see 8.

**Technical Protective:** No special measures required.

**Storage:** Store in dry, cool, well-ventilated area. Store in an area between 0°C and 40°C. Protect from freezing. Keep away from food, drink and animal feeding. Do not allow unauthorized persons to enter.

**Packaging Material:** HDPE (polyethylene high density).

**Storage Away From:** Direct sunlight. Extremely high or low temperatures.

## 8: EXPOSURE CONTROL/PERSONAL PROTECTION

**Engineering Measures:** Provide adequate ventilation.

**Hygiene Measures:** Refer to COSHH assessment (control of Substances Hazardous to Health )Amendment Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials. When using, do not eat, drink or smoke. Change contaminated clothing immediately. Wash clothing before reusing. Wash hands and face after handling thoroughly with soap and water. If necessary, take a shower.

**Occupational Exposure Limits:** Spiromesifen: TWA 0.92 mg/m3, Glycerine: TWA 10.0 mg/m3

**Personal Protection:** Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

**Respiratory Protection:** No special protection equipment is required under normal conditions of use. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonable practicable steps have been taken to reduce exposure at sources e.g. containment and/or local extract ventilation. Always follow the respirator manufacturer's instructions regarding wearing and maintenance.

**Skin Protection:** Suitable protective clothing. Wear coverall and type 6 suits. Wear two layers of clothing where possible. A cotton or cotton/polyester coverall must be worn under the chemical protection clothing and cleaned frequently by an industrial laundry. If a chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by the manufacturer.

**Hand Protection:** Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0.40mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

**Eye Protection:** Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

**Others:** Wash clothing before reusing.

## 9: PHYSICAL/CHEMICAL PROPERTIES

|                                            |                                                                     |                                                       |
|--------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------|
| <b>Appearance:</b> Suspension concentrate  | <b>Relative vapour density (air=1):</b> Not established.            | <b>Physical State:</b> Liquid                         |
| <b>Colour:</b> Whitish-gray.               | <b>Odour:</b> Weak, Characteristic. <b>pH value:</b> 4 - 5.5 @ 23°C | <b>Flash point [°C]:</b> > 100.                       |
| <b>Surface tension:</b> No data available. | <b>Density [kg/m3]:</b> 1050 @ 20 °C                                | <b>Explosion Properties:</b> No explosive properties. |
| <b>Ignition temperature [°C]:</b> 405      | <b>Solubility in water:</b> Forms a suspension                      | <b>Vapour pressure:</b> No data available.            |

## 10: STABILITY & REACTIVITY

**Stability:** Stable under normal circumstances. See also section 7.

**Hazardous Reactions:** None under normal conditions.

**Hazardous Decomposition Products:** Burning may produce e.g.: Carbon monoxide, Hydrocarbons.

**Materials to Avoid:** No specific substances.

**Conditions to Avoid:** Extremely high or low temperatures. Direct sunlight.

## 11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : > 2,500

Rat inhalation LC50 [mg/l/4h] : > 2.759 ( highest achievable concentration )

Dermal (rat) LD50 [mg/kg]: > 4,000

Dermal irritation (rabbit): No skin irritation.

Eye irritation (rabbit): No eye irritation.

Sensitization: No sensitization. (OECD 406, Buehler test)/guinea pig), Sensitizing (OECD 406, Magnusson & Kligman/guinea pig),

Sensitizing (OECD 406, Magnusson & Kligman/guinea pig/active ingredient)

## 12: ECOLOGICAL INFORMATION

### Ecotoxicity

LC50 - 96 Bluegill sunfish [mg/l] : 0.245 IC50-72H-Algae [mg/l] : > 6.4

EC50-48H-Daphnia Magna mg/l: 68.7

## 13: DISPOSAL CONSIDERATION

**Waste-disposal Procedures:** Remove as chemical waste, according to national or local legislation. Advice may be obtained from the local waste regulation authority

**Contaminated Packaging:** Dispose of in a safe manner. According to national or local legislation. Small containers (<10 l or <10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or by manually. rinsing three times. Add washings to the sprayer at time of filling. Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose. Return large containers to supplier. Follow advice on product labels and/or leaflets.

## 14: TRANSPORT INFORMATION

**UN No.** 3082, **Proper Shipping Name:** Environmentally hazardous substance liquid, n.o.s (Spiromesifen Solution)

**Land Transport (ADR/RID):** Class-9, Packing Group-III, Hazard Identification number-90, Hazard Label-9, Item Number- Tunnel Code:E

**Sea Transport (IMO/IMDG):** Class-9, Packing group-III, Marine Pollutant-Yes

**Air Transport (IATA):** Class-9, Packing group-III, Environmental hazard mark-Yes

## 15: REGULATORY INFORMATION

**Labelling:** Symbol Xi Irritant

**Phrases S:** S2, S13, S35, S46, S37, S57

**Other Information:** WHO-Classification: III Slight Hazardous.

**Phrases R:** R43, R50/53

## 16: OTHER INFORMATION

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