

Saudi Delta Company for Chemical Industries

Product Safety Data Sheet

1. Chemical product and company identification

1.1. **Prepared Date:** Jan. 15. 2009

1.2. **Product Information:**

Trade Name: Fiprol 5 % S.C (w/v).

1.3. **Information about manufacturer / supplier :**

Saudi Delta Company for Chemical Industries

Riadh – Saudi Arabia – 3rd Industrial City

Tel. 00966-1-2654533 Fax. 00966-1-2654532

P.O. Box 355809 Riyadh 11383 Saudi Arabia

2. Information on ingredients

2.1. **Chemical properties** (Component Substances).

The product is a mixture of one active ingredient, antifreezing agent, and solvent.

- Fipronil : 5 % w/v (Moderately Systemic insecticide)

- Monoethylene glycol: 1% w/v (Antifreezing Agent)

- Thicking Agent: 2 %

- Antifoaming Agent : 0.2 %

- Water

2.1.1. **IUPAC Name:** (±)-5-amino-1-(2,6-dichloro-a,a ,a-trifluoro-p-tolyl)-4-trifluoromethylsulfinylpyrazole-3-carbonitrile

CAS No.: [120068-37-3]

Development Codes: MB 46030 ;RPA-030

Mol. wt: 437.2

Mol. Formula: C₁₂H₄Cl₂F₆N₄O_s.

Form: White solid .

M.Point: 203 °C

Vapour Pressure: 0.002 mPa (25°C)

Kow: logP = 4.0

Henry: 3.7 x 10⁻⁵ Pa m³ mol⁻¹ (20°C, calc.).

S.g. / Density: 1.477-1.626(20°C).

Solubility: In water 1.9 (PH5) , 2.4 (PH9) In Acetone 545.9 dichloromethane 22.3, hexane 0.028, toluene 3.0 (all in g/l, 20°C).

Stability: Stable in water at PH 5 and 7 ; slowly hydrolysed at PH 9 , slowly degrades in sunlight , rapidly photolysed in aqueous solution

3. Hazard Identification

- 3.1 **Primary Routes of entry:** Absorption / Contact.
- 3.2. **Symptoms of inhalation:** No effects of exposure expected, if misted or at high concentrations, may cause pallor, nausea, anesthetic, or narcotic effects.
- 3.3. **Symptoms of Skin contact :** Prolonged or repeated contact cause redness, Swelling, cracking.
- 3.4. **Symptoms of eyes contact:** painful, burning or stinging of eyes and Lids watering of eyes and Lids.
- 3.5. **Medical conditions aggravated by exposure:** No Data found.

4. First aid Measures

General precautionary measures suggest inducing vomiting immediately by giving two glasses of water and sticking finger down throat . Never give anything by mouth to an unconscious person. Call A physician.

4.1 First Aid For Inhalation :

Remove to fresh air. If not breathing, give artificail respiration, preferably mouth-to-mouth. If Breathing is Diffecult, give oxygen. Call A physician.

4.2 First Aid For Skin Contact:

Wash skin with saop and water. Call a physician. Wash clothing before reuse.

4.3 First Aid For Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes call a physician.

5. Fire Fighting Measures

5.1. **Flash Point :** N/A

5.2. **Autoignition Temp:** N/A

5.3. **Flammable Limits:** N/A

5.4. **Fire Fighting Media:** Water /Alcohol foam /Dry chemical/ Carbon dioxide.

5.5.Special Fire Fighting Procedures:Firefighters should wear positive pressure, full face self-

contained breathing apparatus. Cool fire-exposed containers with water spray.

Caution: After fire is extinguished, material vapors could accumulate, travel to a source of

ignition and flash back

5.6. Fire/Explosion Hazards:Combustible liquid. Fire hazard when exposed to heat, sparks or

flame. Vapors are heavier than air and may travel a considerable distance to a source of

ignition and flash back. Vapor-air mixtures are explosive.

5.7. Hazardous Decomposition products: CO and NOx fumes emitted when heated to decomposition.

6. Accidental Release Measures

6.1 Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. At high concentration, use with adequate ventilation.

Keep container and vapors from this container away from heat, sparks and flame.

Keep

container closed.

6.2. Spill /Leak clean-Up procedures:Eliminate sources of ignition. Absorb with earth, sand or

similar inert material and dispose of with solid waste according to federal, state and local

regulations. Flush spill area with a water spray.

7. Handling and Storage

7.1. Precautionary measures:

Avoid contact with eyes, skin and clothing . Wash thoroughly after handling. At high concentrations, use with adequate ventilation. Keep container and vapors from this container a way from heat, sparks and flame. Keep container closed .

7.2. Storage: Normal Warehousing.

8. Exposure controls , Personal Protections .

8.1. Ventilation: At high concentrations, use with adequate ventilation.

- 8.2. **Respiratory protection** : Niosh-Approved respirator, where TLV or PEL may be exceeded.
- 8.3. **Eye protection** : Chemical goggles.
- 8.4. **Skin protection** : Impervious gloves of natural latex or neoprene (Specifically, natural latex gloves ar -340 and style #Y-18 from glover latexing, -Anaheim, Ca; or a neoprene glove "scorpio" #8-352 fromedmont wilson- Coshocton, OH) .
- 8.5. **Personal Hygiene** : Wash thoroughly after handling.
- 8.6. **Protective measures during repair/Maintenance of equipment**: Wash equipment thoroughly with steam or warm water until clean. Check for flammables with an 'Explosion meter' and also check the oxygen level with an oxygen meter. In all cases, follow good industrial safety practices before entering equipment.

9. Physical and chemical properties

- 9.1. Shape: **Liquid.**
- 9.2. **Colour**: White .
- 9.3. **Odour**: Odorless.
- 9.4. **Product use**: Public Health Use
- 9.5. Melting point: **Not applicable.**
- 9.6. **Boiling Point**: Approx 100°C.
- 9.7. **Specific gravity (25°C)**: 1.01
- 9.8. **Vapour Pressure**: Not available.
- 9.9. Viscosity (CPS): **40 (25°C)**
- 9.10. **Solubility in water**: Forms a white emulsion.
- 9.11. **Flammable Limits**: N/A
- 9.12. **pH of 1% (aq. sol.)** : 4 ~ 7

10. Stability and Reactivity

- 10.1. Stability: **Stable under normal conditions.**
- 10.2 Hazardous Decomposition: **CO and NOx fumes when heated to decomposition of solvent.**
- 10.3. **Dangerous product of decomposition**: Will not occur.
- 10.4. **Incompatible materials**: Strong oxidizing or reducing Agents.

11. Toxicological Information (For Technical grade)

MAMMALIAN TOXICOLOGY:

- 11.1. Oral: **Acute oral LD₅₀ for rats c. 95mg/kg**

11.2. Skin and eye: Acute percutaneous LD₅₀ (24 h) for rats
>2000mg/kg.rabbits 354 mg/kg Non-irritating to eyes and skin (rabbits). Not a skin sensitiser.

11.3. Inhalation LC₅₀: (4h) For rats 0.682mg/l

11.4. NOEL (2y) for rats 0.5mg/kg diet , (18mo)for mice 0.5mg/kg diet 0.2 mg/kg diet; (52 w) for dogs

11.5. ADI 0.0002 mg/kg b. w.

11.6. Other: Not mutagenic or teratogenic

11.6. Toxicity class WHO (a.i.) II; EPA (formulation) II.

12. Ecological Data (Technical grade)

12.1. Birds: Acute oral LD₅₀ for bobwhite quail 11.3 , mallard ducks > 2000, pheasants 31 , red-legged partridges 34 , house sparrows 1120 , pigeons > 2000 mg/kg. Dietary LC₅₀ (5d) for bobwhite quail 49, mallard ducks > 5000mg/kg diet.

12.2. Fish: LC₅₀ (96h) for bluegill sunfish 85, rainbow trout 248mg/l..

12.3. Daphnia: LC₅₀ (48h) 0.19 mg/l.

12.5. Bees:Highly toxic to honeybees both by direct contact and by ingestion

12.6. Worms : Non-toxic.

13. Disposal Considerations

13.1. Pesticides Disposal

Pesticide wastes are toxic . Improper disposal of excess pesticide , spray mixture , or rinsate is a violation of Federal law . If these wastes cannot be disposed of use according to label instructions contact .

Environmental Control Agency , or the Hazardous Waste representative at the nearest EPA Regional Office for guidance .

13.2. Container disposal

13.2.1. Metal containers : Triple rinse (or equivalent) . Then offer for recycling or reconditioning , or puncture and dispose of in a sanitary landfill , or by other procedures approved by local authorities. Do not cut or weld metal containers .

13.2.2. Plastic containers : Triple rinse (or equivalent) . Then offer for recycling or reconditioning , or puncture and dispose of in a sanitary landfill , or incineration , or , if allowed by authorities , by burning . If burned, stay out of smoke .

13.2.3. Returnable / Refillable Sealed Containers : Don't rins container. Do not empty remaining formulated product . Do not break seals . Return intact to point of purchase .

14. Transport Information

GGVE/GGVS : 6.1/III

IMDG-Code : 6.1/ III

IATA/ICAO : 6.1 III

EMS :----

UN : ----

RID/ADR : 6.1

MFAG : ----

PAX : ----

CAO : ----

15. Regulatory Information

15.1. Toxicity Classifications : Moderately Hazardous

15.2. Warning Symbol :



15.3. R-Phrase

R36/38 : Irritating to eyes and skin .

R22 : Harmful if swallowed

15.4 S-Phrase

S41 : In case of fire and /or explosion don't breath fumes .

S22 : Don't breath dust .

S24/25 : Avoide contact with skin and eyes.

S46 : If swallowed, seek medical advice immediately and show this
container or labe .

16. Other Information

The producer warrantees the quality of this product in the original closed packagin, and
of its conformity with authority agreement during 2 years .