

MATERIAL SAFETY DATA SHEET

Topper 250

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

| | | |
|-----|--|---|
| 1.1 | IDENTIFICATION OF THE SUBSTANCE/PREPARATION | Topper 250 (Flonicamid 250g/L SC – suspension concentrate) |
| | CHEMICAL NAME | Flonicamid IUPAC: N-(Cyanomethyl)-4-(trifluoromethyl)pyridine - 3-carboxamide |
| 1.2 | OTHER MEANS OF IDENTIFICATION | N/A |
| 1.3 | USE OF PREPARATION | Insecticide |
| 1.4 | COMPANY/UNDERTAKING IDENTIFICATION | Dor.Ky D&D LTD P.O.B. 232 Nes Ziona, 70400, Israel Tel: +972-8-933 3474 Fax: +972-8-933 0109 |
| 1.5 | EMERGENCY TELEPHONE NUMBER | The Israeli Poisoning Centre Tel: +972-4-777 1900 Fax: +972-4-854 2029 |

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the mixture

2.1.1 Classification according to GHS Regulations

Topper 250 is not hazardous product under GHS Regulations

- Health hazards: None
- Physical hazards: None
- Environmental hazards: None

2.2 label elements

- Hazard pictograms: None
- Hazard pictograms-Codes: None
- Signal words: None
- Hazard statements: None

• **Precautionary statements:**

- **Prevention:** P264+P265: wash hands and skin thoroughly after handling. Do not touch eyes.





- **Response:** P301+P316: IF SWALLOWED: Get emergency medical help immediately.
 P305+P351+P338:
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P331: Do not induce vomiting.

- **Disposal:** P501: Dispose of contents/container in accordance with local regulation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on hazardous ingredients*

| Common name | CAS No. | % | EC Number | Symbol | Hazard |
|---|-------------|----|-----------|---|---|
| Flonicamid | 158062-67-0 | 25 | 605-127-0 |  | Acute Tox 4 - H302 |
| Naphtha (petroleum), hydrotreated, heavy | 64742-48-9 | 8 | 265-150-3 |  | Acute Tox 1 – H304 [#] |
| Alcohol C11, ethoxylated | 127036-24-2 | 4 | 603-182-5 |  | Acute Tox 4 - H302 Eye Dam. 1 – H318 |
| Paraffin oil | 8012-95-1 | 7 | 232-384-2 |  | Acute Tox 1 – H304 |

For occupational exposure limits, see section 8

For the full text of the H statements in this section, see section 16.

[#] Note P: The classification as carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0.1% benzene (EINECS No. 200-753-7).

4. FIRST AID MEASURES

4.1 Description of first aid measures

| | | |
|-------|---------------------|---|
| 4.1.1 | EYE CONTACT | Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention |
| | SKIN CONTACT | Remove contaminated clothing. Wash away remainder with water and soap |
| | INHALATION | Remove victim to fresh air. If breathing is difficult: artificial respiration. Get medical attention. |

| | | |
|---------------------------------------|---|---|
| | INGESTION | Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person. |
| 4.1.2 | Advice | Remove victim from area of exposure. Wash off remaining material with plenty of water. For more medical advice see Section 4.1.1. |
| 4.2 | Most important symptoms and effects, both acute and delayed | In general, no effects are expected for oral, dermal and inhalation routes under conditions for normal use. |
| 4.3 | Indication of any immediate medical attention and special treatment needed | Note to physician: No special antidote. Treat symptomatically and supportively. |
| 5. FIRE-FIGHTING MEASURES | | |
| 5.1 | Firefighting media: | Water spray, foam, carbon dioxide and sand |
| 5.2 | Special hazards arising from the substance or mixture | In a fire, formation of fluoride, carbon and nitrogen oxides compounds can be expected. |
| 5.3 | Advice for firefighters | For fire-fighters: Self-contained breathing apparatus and total protection required in enclosed areas. Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Bund area with sand to prevent contamination of drains or waterways. Dispose of fire control water, another extinguishing agent or spillage later. Do not release contaminated water into the environment. |
| 6. ACCIDENTAL RELEASE MEASURES | | |
| 6.1 | Personal precautions | Avoid contact with spilled material or contaminated surfaces. When dealing with spills do not eat, drink, or smoke and wear protective clothing and equipment as described in Section 8. Keep people and animals away. |
| 6.2 | Environmental precautions | Do not discharge into drains or the environment |
| 6.3 | Methods for cleaning up | contain spills and absorb with earth, sand, clay, or other absorbent material. Collect and store in properly labeled, sealed, drums for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority. |

| 7. HANDLING AND STORAGE | |
|--|--|
| 7.1 | Handling Keep out of reach of children. Wash hands thoroughly with soap after handling and before eating, drinking, and smoking. After each day's use, wash gloves and contaminated clothing |
| 7.2 | Storage Keep only in the original container. Keep in a cool, dry, well-ventilated place away from direct sunlight. Flammability: not flammable |
| 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION | |
| 8.1 | Control parameters |
| Industrial Hygiene measures | Ventilation required. When handlings do not eat, drink, or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use. Contaminated work clothing should not be allowed out of the workplace. |
| Personal protective equipment | |
| - Respiratory system | Respiratory protection is not required if good ventilation is maintained. However, If operating conditions result in airborne concentrations of this material, the use of an approved respirator is recommended. |
| - Skin and body | Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks and chemical-resistant gloves made of any waterproof material. Remove and wash contaminated clothing separately |
| - Hands | Chemical resistant gloves. |
| - Eyes | Safety goggles or face shield |
| 8.2 | Occupational Exposure Limits |
| Flonicamid | Not established |
| Naphtha (petroleum), hydrotreated, heavy | TWA 400 mg/m ³ (100 ppm) |
| Alcohol C11, ethoxylated | Not established |
| Paraffin oil | Not established |
| 9. PHYSICAL AND CHEMICAL PROPERTIES | |
| APPEARANCE | liquid (suspension concentrate, SC) |
| COLOUR | Beige |
| ODOUR | Slight specific odour |
| FLASH POINT | > 65°C |
| FLAMMABILITY | Non-flammable |
| DENSITY | 1.01 g/mL (25°C) |
| WATER SOLUBILITY | Miscible in water |
| Viscosity | 600 mPa.s at 20 rpm, 20°C |
| pH | 5-6 |

| 10. STABILITY AND REACTIVITY | | |
|--|------------------------------------|---|
| 10.1 | Reactivity | The product is not reactive during storage |
| 10.2 | Chemical stability | Stable under normal storage conditions. |
| 10.3 | Possibility of hazardous reactions | Not known |
| 10.4 | Conditions to avoid | Extreme heat |
| 10.5 | Incompatible materials | Strong acids and alkalis |
| 10.6 | Hazardous decomposition products | In a fire, formation of fluoride, carbon and nitrogen oxides compounds can be expected. |
| 11. TOXICOLOGICAL INFORMATION – <i>product data</i> | | |
| 11.1 | Acute oral toxicity, rat | LD ₅₀ > 2,000 mg/kg |
| 11.2 | Acute dermal toxicity, rat | LD ₅₀ > 2,000 mg/kg |
| 11.3 | Acute inhalation toxicity, rat | LC ₅₀ > 2.62 mg/L (4-h, exposure; max attainable concentration) |
| 11.4 | Skin irritation, rabbit | Not irritant |
| 11.5 | Eye irritation, rabbit | Not Irritant |
| 11.6 | Sensitization, guinea pig | Not sensitizer |
| <p>Data is for Flonicamid: Short term toxicity: The short-term effects of flonicamid after oral administration were studied in rats (28 and 90 days), in dogs (28/35 and 90 days, 1 year) and in mice (90 days). The target organs were the liver (rats, mice), the kidney (rats) and the haematopoietic system (anaemia in mice). In the rat studies, the adverse effects on the kidneys were considered as mediated by the male rat specific protein, α-2 μ-globulin, and were not regarded as relevant to humans. Therefore, the short-term NOAEL in rats was 60 mg/kg bw/day from the 90-day study. In the dog studies, the relevant NOAEL was 8 mg/kg bw/day, based on reduced body weight gain, reduced thymus weight in males (90-d), and mild anaemia (1-y). In the mouse study, the NOAEL was 15.3 mg/kg bw/day based on hepatocellular hypertrophy and splenic extramedullary haematopoiesis (related to anaemia).</p> <p>The findings in the short-term studies are not deemed relevant for classification.</p> <p>Genotoxicity: No genotoxic potential</p> <p>Long term toxicity and carcinogenicity Relevant NOAEL: 7.32 mg/kg bw/d (rat, 2-y) 10 mg/kg bw/d (mouse, 18-month)</p> <p>Carcinogenicity: Tumours observed in animal experiments are not relevant to humans</p> <p>Reproduction Toxicity: Reproduction target / critical effect. <u>Reproduction:</u> no adverse effect on reproductive parameters <u>Parents:</u> kidneys lesions, reduced ovary/adrenal weights <u>Offspring:</u> delayed vaginal opening and reduced uterus weight in F1 weanlings:</p> <p>Relevant parental NOAEL: 18 mg/kg bw/d Relevant reproductive NOAEL: 109 mg/kg bw/d (highest dose tested) Relevant offspring NOAEL: 30 mg/kg bw/d</p> | | |

12.2 Persistence/degradability:

Soil

In soil under aerobic conditions Flonicamid and its major metabolites exhibit very low to low persistence

Degradability:

DT_{50lab} in soil (20°C) < 1 days (Flonicamid)

DT_{50lab} in soil (20°C) < 1 days (metabolites)

Water

Hydrolytic degradation

Flonicamid is stable in water.

Photolytic degradation

Sterilized natural water

Negligible

Water/sediment (20°C)

DT₅₀ water = 30.3-37.3 days

Ready biodegradability: No.

12.3 Bio-accumulative potential: No potential for accumulation.

12.4 Mobility in soil

Flonicamid and its metabolites are very mobile in soil, however their persistence in soil is very short (< 1 day)); hence, their low leaching potential.

Conclusions on classification and labelling for environmental hazards

In toxicity studies for all aquatic organisms EC₅₀s at concentrations above > 100 mg/L were obtained. In addition, Flonicamid is not readily biodegradable. However, based on Flonicamid physico-chemical properties (log Kow < 3), it is unlikely for the substance to bioaccumulate. Based on these findings, and according to the GHS/CLP Regulation, Flonicamid should be not classified for any environmental hazards.

13. DISPOSAL CONSIDERATION

Product would be treated, stored, transported, and disposed of according to the local waste regulation authority. Do not flush to surface water or sanitary sewer system

14. TRANSPORT INFORMATION

Not regulated for transport.

15. REGULATORY INFORMATION

15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture

Ensure all national/local regulations are observed.

15.2 Chemical Safety Assessment

16. OTHER INFORMATION:

The information contained in the Safety data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage, and transportation and is not intended as warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

Text for phrases appear in section 3:

Hazard (H) statements:

H302: *Harmful if swallowed*

H304: *May be fatal if swallowed and enters airways*

H318: *Causes serious eye damage*

Date: February 2023

UpDate: May 2024