

MATERIAL SAFETY DATA SHEET**STATEMENT OF HAZARDOUS NATURE:**

Hazardous according to the criteria of the National Occupational Health and Safety Commission

COMPANY DETAILS:

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IDENTIFICATION**PRODUCT NAME:- Clipguard® Pour-On Lousicide for Sheep**

| | | | |
|--------------------------|----------------|---|----------------|
| Chemical Type: | Benzoyl urea | Dangerous Goods Class and Subsidiary Risk: | None allocated |
| CAS Number: | 64628-44-0 | Hazchem Code: | None allocated |
| Poisons Schedule: | S5 | Packaging Group: | None allocated |
| U.N. Number: | None allocated | WHO Hazard Class: | None allocated |

USE - Control of body lice on sheep via pour-on application.

PHYSICAL DESCRIPTION/PROPERTIES

| | | | |
|--------------------------|----------------------|------------------------------------|--------------------------------------|
| Appearance: | Clear green solution | Vapour Pressure (20°C): | 0.4 x 10 ⁻⁹ mbar (active) |
| Odour: | Aromatic | Solubility in Water (20°C): | 2.5 x 10 ⁻⁵ g/L (active)* |
| Specific Gravity: | 0.98 g/mL @ 20°C | Viscosity: | 22 cps (RVT spindle #1 at 10 rpm) |
| Boiling point: | Not applicable | Flashpoint: | 88°C (DIN 51758) |

* formulation is miscible with water but the active crystallises.

OTHER PROPERTIES:

pH: 7 at 100 g/L (active)
Ignition temperature: not available
Explosive limits: not available

Triflumuron undergoes thermal decomposition above 380°C.
Formulation may damage certain paints and surface finishes.
Product is hygroscopic.

INGREDIENTS

| | CAS NUMBER | PROPORTION |
|----------------------------|-------------------|-------------------|
| Triflumuron | 64628-44-0 | 25 g/L |
| N-methylpyrrolidone | 872-50-4 | Medium (10-29%) |
| Other solvents | | V. high (>60%) |
| Process related byproducts | | |

HEALTH HAZARD INFORMATION**HEALTH EFFECTS**

Solvents are harmful if inhaled or swallowed. May irritate eyes and skin. There are no specific known symptoms of triflumuron toxicity.

The product is a chitin synthetase inhibitor – this enzyme is not present in mammals. The active has very low mammalian toxicity. Its low toxicity makes it of minor importance relevant to solvent effects in cases of ingestion.

The long term effects of exposure to the product are not known. Triflumuron has been shown in animal tests to be non-carcinogenic, non-teratogenic and non-mutagenic.

Tests on rats indicate low toxicity following a single dose of this material. (LD₅₀ > 5000 mg/kg)

Tests on rats indicate a low toxicity due to skin contact with this material. (LD₅₀ > 5000 mg/kg)

The solvents in this product may irritate the eyes and skin.

FIRST AID

If poisoning occurs by any exposure route contact a doctor or Poisons Information Centre (Ph: 131126).

- Swallowed: Seek medical attention immediately.
- Eye: Hold eyes open and flood with large quantities of clean tap water for at least 15 minutes.
- Skin: Remove contaminated clothing and wash skin thoroughly with soap and water.
- Inhaled: Move patient to fresh air and loosen constrictive clothing. Seek medical attention immediately.

ADVICE TO DOCTORS

Systemic toxicity with this product is unlikely.

The product is a chitin synthesis inhibitor; this enzyme is not present in mammals.

If ingested, apply basic aid, decontamination and symptomatic treatment for possible solvent inhalation into the lungs.

PRECAUTIONS FOR USE

Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke while working.

EXPOSURE LIMITS:-

The following standards apply for dipropylene glycol monomethyl ether:

TWA 100 ppm, 606 mg/m³ (ACGIH)

STEL 150 ppm, 909 mg/m³ (ACGIH)

NOHSC exposure standards have not been set for trifluorom or other inert ingredients in this formulation.

ENGINEERING CONTROLS:-

No engineering controls are required where this product is used according to label directions.

PERSONAL PROTECTION:-

Harmful if inhaled or swallowed. May irritate the eyes and skin. Avoid inhaling vapour. Avoid contact with eyes and skin.

When using the product wear elbow-length butyl rubber gloves.

If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves and contaminated clothing.

FLAMMABILITY:-

Protection against fire and explosion:- no specific precautions required.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT:-

Store below 30°C. Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

This product is not classified as a dangerous good, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

SPILLS AND DISPOSAL:-

Procedure for spill :

Prevent spillage from spreading, and take all possible steps to avoid spillage entering waterways and drains (where it can contaminate aquatic environments). Take up with absorbent material such as sawdust, peat or a chemical binding agent. Fill material along with any contaminated soil etc. into

sealable containers. Clean affected area with aqueous detergent and a small amount of water. Absorb this detergent/water material with absorbent material. Do not eat, drink or smoke during cleanup operation.

Disposal:

(1) After intended use: Triple rinse containers with diesel, and dispose of rinsate in a disposal pit away from desirable plants and their roots, and watercourses. On site disposal of undiluted chemicals is unacceptable. Destroy empty containers by breaking, crushing or puncturing them. Dispose of the empty containers at a local authority landfill that does not burn its refuse. If there is no local authority landfill readily available in your area, bury the containers at a depth of 500 mm or more at a licensed/approved disposal site. Do not burn empty containers or product.

(2) After spill or accident: Dispose of sealed containers at an approved local waste disposal site. Do not dispose of cleanup material or waste product collected from spill sites in a manner which could contaminate aquatic environments.

DAMAGED CONTAINERS:

Place original containers in specially marked larger ones. Dispose of EMPTY CONTAINERS as described above under "Disposal".

FIRE/EXPLOSION HAZARD:-

Hazardous polymerisation will not occur. Triflumuron undergoes thermal decomposition above 380°C. Hazardous decomposition products:- in a fire, hydrochloric acid, hydrogen fluoride, amines and carbon monoxide may be evolved.

Firefighting procedures:

Extinguish fires using foam, carbon dioxide, extinguishing powder, sand, sprayed water jet.

Fight fire in early stages if safe to do so. Wear respiratory protection.

In well ventilated areas, wear full face mask with combination filter e.g. ABEK-P2 (offers no protection from carbon monoxide). In enclosed premises, wear respirator with independent air supply.

Do not allow fire-water to enter drains and waterways.

OTHER INFORMATION:-Environmental effects:

Canary – LD₅₀ >1000 mg/kg

Bobwhite quail – LD₅₀ 561 mg/kg

Daphnia magna – LC₅₀ 225 ppb (48 h)

Rainbow trout – LC₅₀ >320 ppm (96 h)

Golden Orfe – LC₅₀ >100 ppm (96 h)

Octanol/water partition coefficient – Log Po/w 4.91 (active)

Degradation of active – half times (22°C):

960 days at pH 4; 580 days at pH 7; 11 days at pH 9

Triflumuron is a toxic hazard to juvenile aquatic and terrestrial arthropods.

Note: This material is a veterinary chemical and is therefore subject to regulation under the Federal Agriculture and Veterinary Chemicals Act, 1988.

CONTACT POINT: Regulatory Affairs Manager - Animal Health - (02) 9805 3555

The information and recommendations given in this Material Safety Data Sheet are based on our best present knowledge at the time of writing. However, we decline any liability in connection with the above information, except those non-excludable conditions implied by any Federal and State legislation or law of a Territory.

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