



MATERIAL SAFETY DATA SHEET

A18081/06/AUS

ZAPP POUR-ON LOUSICIDE FOR SHEEP

SECTION 1 – IDENTIFICATION, CONTACTS, HAZARDOUS NATURE

Bayer Australia Ltd
875 Pacific Highway
Pymble NSW 2073

Emergency Telephone Number

1800 033 111

24 hour Emergency Service Australia Wide, Toll Free

Contact Point (for non-emergency calls)

Animal Health Division

Telephone Number: (02) 9391-6000

Product Name

Zapp Pour-on Lousicide for Sheep

Product Use

Pour-on lousicide for sheep.

Other Names

Triflumuron, N-methyl-2-pyrrolidone, dipropylene glycol methyl ether

Creation Date

25th June 2003

Revision Date

25th June 2003

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification

HAZARDOUS SUBSTANCE

NON-DANGEROUS GOODS

Risk Phrases

Irritating to eyes and skin.

Safety Phrases

Do not breathe vapour. After contact with skin, wash immediately with plenty of water and soap. In case of fire and/or explosion do not breathe fumes.

**RISK & SAFETY PHRASES ARE NOT REQUIRED ON PACKAGES
INTENDED FOR END USERS. APPROPRIATE SAFETY DIRECTIONS
AND FIRST AID STATEMENTS ARE SHOWN ON THE PRODUCT LABEL.**

SECTION 3 – COMPOSITION		
Ingredients	CAS No	Proportion
Triflumuron*	64628-44-0	2.5%
N-methyl-2-pyrrolidone	872-50-4	10 - <30% %
Dipropylene glycol methyl ether	34590-94-8	>60%
Other ingredients determined not to be hazardous	-	<10%
*Triflumuron is a benzoyl urea; 2-Chloro-N-(((4-(trifluoromethoxy)phenyl)amino)carbonyl)benzamide		

SECTION 4 – FIRST AID MEASURES	
Label Regulated First Aid Statement	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131126.
General	Remove victim from contaminated area. If there is a risk of unconsciousness, position and transport in a stable lateral position. Remove soiled or soaked clothing immediately.
Scheduled Poisons	Poisons Information Centres in each State capital city can provide additional assistance for scheduled poisons. Phone 131126.
Inhalation	Inhalation of this product is a risk. In this event remove from exposure and perform artificial respiration if necessary.
Skin contact	Remove contaminated clothing. Wash affected area immediately with soap and water. Seek medical attention if required.
Eye contact	Flush eye immediately with large amounts of water or normal saline, occasionally lifting eyelids, until no evidence of chemical remains. Seek medical attention if eye irritation persists.
Ingestion	If vomiting occurs keep head lower than hips to help prevent aspiration. Seek medical attention if required.
Advice to doctor	See also Chapter 11. Solvents are harmful if inhaled or swallowed. The product is a chitin synthetase inhibitor - this enzyme is not present in mammals. There are no specific symptoms of triflumuron toxicity known. The active constituent has very low mammalian toxicity. Its low toxicity makes it of minor importance relevant to solvent effects in cases of ingestion.. Systemic toxicity with this product is unlikely. In the event of ingestion apply basic aid, decontamination and symptomatic treatment for possible solvent inhalation into the lungs.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media	Sprayed water jet, foam, dry powder, CO ₂ , sand
Fire and Explosion Hazards	Combustible product. Product has a flash point of 88°C.
Hazardous Combustion Products	Thermal decomposition products include hydrogen chloride, hydrogen fluoride, carbon monoxide, and nitrogen oxides.
Fire Fighting	<p>Fight fire in the early stages if safe to do so. Wear respiratory protection.</p> <p>In well ventilated areas wear full face mask with a combination filter. (Offers no protection from carbon monoxide)</p> <p>In enclosed premises: respirator with independent air supply.</p> <p>Contain firefighting water.</p>

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Accidental Release	<p>Use any personal protective equipment listed in Chapter 8.</p> <p>Take all possible steps to prevent spillage from spreading or entering soil, waterways and drains.</p> <p>Take up with absorbent material such as sawdust, peat or chemical binder. Fill material along with any contaminated soil etc., into sealable containers. Clean affected area with an aqueous detergent and a small amount of water. Absorb this with hydrated lime and place in a sealable container. Spread hydrated lime over the affected area. On completion of clean-up remove and wash all protective clothing and equipment with detergent and water. Place cleaning materials into the same container.</p> <p>Do not eat, drink or smoke during clean-up operation.</p>
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SECTION 7 – HANDLING AND STORAGE

Safe Handling	Pour the product using a funnel or other equipment to avoid splashing and glugging. Suitable container materials: HDPE.
Storage	<p>Keep out of reach of children.</p> <p>Store away from food, drink or animal feeding stuffs.</p> <p>To maintain product quality, store below 30°C.</p> <p>Keep away from heat or moisture.</p> <p>This material is a Schedule 5 poison and must be stored, handled and used in accordance with the relevant regulations.</p>

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits	ES-TWA Dipropylene glycol methyl ether, 606 mg/m ³ (100 ppm) (NOHSC) ES-STEL Dipropylene glycol methyl ether, 909 mg/m ³ (150 ppm) (NOHSC) ES-MAK Dipropylene glycol methyl ether, 300 mg/m ³ (50 ppm) ES-MAK N-methyl-2-pyrrolidine, 400 mg/m ³ (100 ppm) No exposure standards allocated for triflumuron or other ingredients of this product.
Ventilation	Harmful if inhaled or swallowed. Do not inhale vapour. Ensure adequate ventilation during use to prevent build-up of fumes.
Eye Protection	Will irritate the eyes. Avoid contact with eyes. If product in eyes, wash out immediately with water. Wear a face shield while handling the concentrate..
Skin Protection	Will irritate the skin. Avoid contact with skin. When using the product wear elbow-length butyl rubber gloves. If product on skin, immediately wash area with soap and water. Wash hands before breaks and at end of work.
Respirator	No respirator is required under normal conditions of use.
Protective Material Types	Butyl rubber
General Advice	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. Product is poisonous if swallowed.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Physical State	Clear liquid
Colour	Blue
Odour	Aromatic
Boiling Point	Not available
Solidifying point	Not available
Density	0.982 kg/L at 20°C
Vapour Pressure	4 x 10 ⁻⁵ mPa at 20°C (triflumuron)
Viscosity	Not available
Solubility in Water	Miscible
pH	Not relevant
Flash Point	88°C
Ignition Temperature	Not available
Explosive Limits	Not available
Other Information	Product is packed in 5 and 20 litre plastic containers

SECTION 10 – STABILITY & REACTIVITY

Chemical Stability	Product is chemically stable. Product is hygroscopic.
Conditions to Avoid	Avoid oxidising agents.
Incompatible Materials	None
Hazardous Decomposition	Thermal decomposition products include hydrogen chloride, hydrogen fluoride, carbon monoxide, and nitrogen oxides.
Hazardous Reactions	None

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity	Oral LD ₅₀ (rat) >5000 mg/kg (of formulation) Dermal LD ₅₀ (rat) >5000 mg/kg (of formulation)
Local Effects	Eye: will irritate the eye Skin: will irritate the skin
Reproductive Effects	None of the ingredients of the formulation have been shown to produce reproductive or teratogenic effects.
Mutagenicity	None of the ingredients of the formulation have been shown to produce mutagenic effects.
Carcinogenic Effects	Triflumuron has been shown in animal tests to have no carcinogenic potential. Other ingredients are not classified as carcinogens
Health Hazard Information	Triflumuron is a chitin synthetase inhibitor which in insects disrupts exoskeleton formation. Since this enzyme is not present in mammals triflumuron has no direct toxic effect in these species.

SECTION 12 – ECOLOGICAL INFORMATION

Octanol/Water Partition Co-efficient	Log Pow = 4.91 at 20°C
Ecotoxicity	<p>Fish toxicity triflumuron LC₅₀ >320 mg/L (96h) Rainbow trout (<i>Salmo gairdneri</i>) LC₅₀ >100 mg/L (96h) Golden orfe (<i>Leuciscus idus</i>).</p> <p>Daphnia toxicity triflumuron LC₅₀ 0.225 mg/L (48h) Water flea (<i>Daphnia magna</i>)</p> <p>Algal toxicity triflumuron EC₅₀ >25 mg/L (96h) Green algae (<i>Scenedesmus</i>)</p> <p>Bird toxicity triflumuron LD₅₀ 561 mg/kg Bobwhite quail</p>

	Triflumuron is a toxic hazard to juvenile aquatic and terrestrial arthropods. Do not contaminate ponds, waterways or drains with product or used containers.
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SECTION 13 – DISPOSAL INFORMATION	
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 to a depth of 500 mm or more at a licensed/approved disposal site. Do not burn empty containers or product.
After spill or accident	Dispose of sealed containers at an approved local waste disposal site.

SECTION 14 – TRANSPORT INFORMATION	
UN No	Not classified
UN Proper Shipping Name	Not classified
Class & Subsidiary Risk	Not classified
Packaging Group	Not classified
Hazchem Code	Not classified

SECTION 15 – REGULATORY INFORMATION	
Poisons Schedule	Schedule 5
APVMA Registration	The product is registered by the APVMA.
Registration Number	45636
Labelling	All necessary directions, precautions and warnings for normal use of the product are included on the product label.

SECTION 16 – OTHER INFORMATION

Summary of Changes
from Last Edition

Update from NOHSC 1994 format.

Acronyms

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail

APVMA Australian Pesticides and Veterinary Medicines Authority

CAS Chemical Abstracts Service Registry Number

HDPE High density polyethylene

LDPE Low density polyethylene

NOHSC National Occupational Health & Safety Commission

SUSDP Standard for the Uniform Scheduling of Drugs and Poisons

UN Number United Nations number

Disclaimer

This Material Safety Data Sheet has been developed according to the NOHSC National Code of Practice for the Preparation of MSDS [NOHSC:2011(2003)].

The data, information and recommendations herein ("information") are represented in good faith and believed to be correct as of the date hereof.

The purpose of this Material Safety Data Sheet is to describe product in terms of their safety requirements.

Bayer Australia Limited make no representation of merchantability, fitness for a particular purpose or application, or of any other nature with respect to the information or the product to which the information refers ("the product").

The information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use of the product.

The physical data shown herein are typical values based on material tested. These values should not be construed as a guaranteed analysis of any specific lot or as guaranteed specification for the product or specific lots thereof.

Due care should be taken to make sure that the use or disposal of this product and / or its packaging is in compliance with relevant Federal, State and Local Government regulations.

END OF MSDS