

SAFETY DATA SHEET

Zenith[®] Spray-on

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Section 1: Identification of the Substance and Supplier

Product name	Zenith Spray-on Flammable liquid containing 1-3% diflubenzuron
Recommended use	For the control of lice on sheep and for the treatment and control of flystrike.
Company details	Coopers, 33 Whakatiki Street, Upper Hutt Phone: 0800 800 543 Fax: 0800 808 100 Website: www.coopersonline.co.nz Hours: 8 am – 5 pm, Mon – Fri
Emergency telephone	0800 764 766 (0800 POISON) 24 hours human health 0800 243 622 (0800 CHEMCALL) 24 hours
Date of preparation	September 2011

Section 2: Hazards Identification

Hazard classifications	3.1D, 6.3A, 6.4A, 6.8A, 6.9B, 9.1A
Priority identifiers	WARNING – combustible liquid Ecotoxic
Secondary identifier	3.1D Combustible liquid – keep away from sources of ignition 6.3A May cause skin irritation 6.4A May cause eye irritation 6.8A May damage fertility or the unborn child from repeated oral exposure 6.9B May cause damage to blood and the hematopoietic system from repeated oral exposure at high doses 9.1A Very toxic to aquatic organisms with long lasting effects
Risk & Safety Phrases	R63 Possible risk of harm to the unborn child R50 Very toxic to aquatic organisms

Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration
Diflubenzuron	35367-38-5	2%
Liquid hydrocarbons	64742-94-5	9.3%
N-Methylpyrrolidone	872-50-4	30%

Section 4: First Aid Measures

Necessary first aid measures	INHALATION Remove to fresh air and provide oxygen if necessary. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a doctor. SKIN CONTACT While wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a doctor.
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EYE CONTACT Immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a doctor.

INGESTION Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or National Poisons Centre. If symptoms persist, consult a doctor.

Required instructions	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.
Notes for medical personnel	Treat symptomatically. Gastric lavage with medicinal charcoal in water is recommended.
Workplace facilities	Emergency showers and eyewashes may be warranted depending on quantity and type of use.

Section 5: Fire Fighting Measures

Type of hazard	Combustible liquid
Fire hazard properties	There is a slight risk of an explosion from this product if it is involved in a fire. Fire decomposition products from this product may form toxic mixtures in confined spaces. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.
Regulatory requirements	Two (2) fire extinguishers required where quantities greater than 500L
Extinguishing media and methods	Carbon dioxide (CO ₂), extinguishing powder or foam
Hazchem code	3Z (Contain spillage)
Recommended protective clothing	Wear full protective clothing and self-contained breathing apparatus (SCBA).

Section 6: Accidental Release Measures

Emergency procedures	Wear chemical resistant gloves and overalls, facemask or goggles. Prevent further spillage. Adsorb spilled product and place in sealable container for disposal. Wash down affected area with water plus detergent. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding disposal. Avoid contamination of any water source or soil with product or empty container.
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Section 7: Handling and Storage

Precautions for safe handling	Avoid contact with skin, eyes, and mucosa. Keep containers adequately sealed during material transfer, transport, or when not in use. See Section 8 (Exposure Controls) for additional guidance.
Regulatory requirements	Two (2) fire extinguishers required where quantities greater than 500L Signage required where quantities greater than 100L are present. Emergency Plan required where quantities greater than 100L are present.

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Handling practices	Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.
Approved handlers	Not required.
Conditions for safe storage	Store in original container in a cool, dry, ventilated place away from direct heat or direct sunlight. Keep container sealed when not in use. Keep out of reach of children.
Store site requirements	Store at room temperature, in a cool/well-ventilated place.
Packaging	PG III

Section 8: Exposure Control/Personal Protection

Workplace exposure standards	No WES is set for this substance at this time.
Application in the workplace	Ensure adequate ventilation. Keep container sealed when not in use.
Exposure standards outside the workplace	No TEL is set for this substance at this time No EEL is set for this substance at this time
Personal protection	Wear chemical resistant gloves, facemask or goggles.
Engineering controls	The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.

Section 9: Physical and Chemical Properties

Appearance	Yellow clear liquid
Boiling Point	Not available
Melting/Softening point	Not applicable
Vapour Pressure	Not determined
Specific Gravity	0.95 – 1.05 @ 20°C
Solubility (H ₂ O)	Dispersible
Percent Volatiles	Not determined
Evaporation Rate	Not determined

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Section 10: Stability and Reactivity

Stability of the substance	Stable under normal conditions.
Conditions to avoid	Avoid high temperatures
Material to avoid	Avoid food products
Hazardous decomposition products	Carbon oxides (COx), Sulphur oxides (SOx), and Nitrogen oxides (NOx).

Section 11: Toxicological Information

Acute effects for individual ingredients only

ORAL DIFLUBENZURON	Diflubenzuron: LD ₅₀ (rat) > 4640mg/kg N-Methylpyrrolidone: LD ₅₀ (rat) = 3914mg/kg
DERMAL	Diflubenzuron: LD ₅₀ (rat) > 10000mg/kg, LD ₅₀ (mouse) = 7725mg/kg N-Methylpyrrolidone: LD ₅₀ (rat) > 8000mg/kg
INHALATION	Diflubenzuron: LC ₅₀ (rat) > 35mg/L – 6 hours
TEL	No TEL is set for this substance at this time.

Chronic/long term effects for individual ingredients only

Diflubenzuron: Mild eye irritant in rabbit [REDS]

Diflubenzuron: In a 13-week feeding study technical grade diflubenzuron was administered in the diet to beagle dogs at dose levels of 0 (control), 10, 20, 40 or 160 ppm (equal to 0, 0.42, 0.84, 1.64 or 6.24 mg/kg/day).

Ophthalmoscopic examinations were negative. Methemoglobinemia was observed in the dogs at 6.24 mg/kg/day (after 6 weeks). No gross necropsy, organ weight or histopathological changes were reported at any level that could be related to treatment. The NOEL is 1.64 mg/kg/day. The LEL is 6.24 mg/kg/day, based on increased methemoglobinemia. (MRID 00038706) [REDS]

Section 12: Environmental Information

Effects for individual ingredients only.

AQUATIC	Diflubenzuron: Cutthroat trout <i>Oncorhynchus clarki</i> 96 hr LC ₅₀ 57ppm [EPA PESTICIDES DB], <i>Daphnia magna</i> Technical 43665801 Toxic 48hr LC ₅₀ = 3.7ppb Very Highly [REDS] Oral LC ₅₀ (rainbow trout) = 240mg/L (96hr) Oral LC ₅₀ (bluegill) = 660mg/L (96hr) Oral LC ₅₀ (saltwater minnow) = 660mg/L (96hr)
EEL	No EEL is set for this substance at this time.

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Section 13: Disposal Considerations

Disposal information	Disposal Dispose of unused product through Agrecovery Chemicals. Avoid contamination of any water source or the environment with product or empty container. Container Disposal Triple rinse empty container, puncture and recycle through Agrecovery. Do NOT burn.
Reference	Current version of NZS 8409 Management of Agrichemicals

Section 14: Transport Information

Relevant information	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diflubenzuron) Marine Pollutant Class 9 PG III Limited quantities: 5L Maximum quantity for own agricultural use: 1000L Note: Not classified as a Flammable DG for transport
Other requirements	Refer to Haznote.

Section 15: Regulatory Information

Regulatory status	HSNO Approval Code: HSR001794. For a full listing of controls see www.epa.govt.nz ACVM registration number: A07705. For conditions of registration see www.foodsafety.govt.nz
HSNO and ACVM controls	Signage: 100 Litres Emergency Plan: 100 Litres

Section 16: Other Information

Additional information	Zenith is a registered trademark.
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