

Bravecto[®] spot-on solution

Section 1: Identification of the Substance and Supplier

Product name	Bravecto spot-on solution
Recommended use	For spot-on flea and tick treatment in cats and dogs
Company details	MSD Animal Health, 33 Whakatiki Street, Upper Hutt Phone: 0800 800 543 Fax: 0800 808 100 Website: www.msd-animal-health.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	October 2016

Section 2: Hazards Identification

Hazard classifications	3.1B, 6.1E (dermal), 6.3A, 6.4A, 6.8A, 9.1A
Priority identifiers	DANGER Ecotoxic
Secondary identifier	3.1B Highly flammable liquid and vapour – keep away from sources of ignition 6.1E May be harmful if absorbed through the skin. 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. 9.1A Very toxic to aquatic organisms with long-lasting effects.
Risk & Safety Phrases	R21 Harmful by in contact with skin. R11 Highly flammable R67 Vapours may cause drowsiness and dizziness R50 Very toxic to aquatic organisms

Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration
Fluralaner	846731-61-3	13.64%
Dimethylacetamide (DMA)	127-15-5	30 – 40%
Diethyltoluamide (DEET)	134-62-3	13.2%
Acetone	67-64-1	10 – 20%

Bravecto[®] spot-on solution**Section 4: First Aid Measures****Necessary first aid measures**

SKIN CONTACT In case of skin contact, carefully remove any contaminated clothing, including shoes. Remove as much as possible using an absorbent material such as tissue paper or cotton. Wash skin thoroughly with soap and water. If there is any remaining sticky residue – this can be removed with alcohol (eg rubbing alcohol or alcohol based skin disinfectant gel). If irritation or symptoms occur or persist, consult a doctor.

EYE CONTACT In case of 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 with water 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.

INHALATION Remove affected person promptly to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased.

Required instructions

For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.

Section 5: Fire Fighting Measures

Type of hazard	Flammable (contains Acetone and Dimethylacetamide (DMA))
Fire hazard properties	Burning can produce carbon monoxide and/or carbon dioxide
Regulatory requirements	Two fire extinguishers are required where quantities greater than 250L are present.
Extinguishing media and methods	Carbon dioxide (CO ₂), extinguishing powder or water spray.
Hazchem code	2YE (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 with non-combustible absorbent material 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 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.
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Regulatory requirements	Signage required where quantities greater than 100L are present. Emergency Plan required where quantities greater than 100L are present. Two fire extinguishers are required where quantities greater than 250L are present. Location certificate required where quantities greater than 100L are present. Hazardous Atmosphere Zone applicable where quantities greater than 100L are present.
Handling practices	Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.
Approved handlers	Required where quantities greater than 500L are present.
Conditions for safe storage	Store in original packaging. Keep packaging sealed when not in use. Keep out of reach of children. Keep away from heat, sparks, open flame or other sources of ignition.
Store site requirements	Store at room temperature away from foodstuffs in the original package to protect from moisture. Do not refrigerate. Keep away from heat, sparks, open flames, and direct sunlight. Avoid extreme heat. Not to be stored with explosives, flammable gases in bulk, poisonous gasses, spontaneously combustible substances, oxidizing agents, organic peroxides or radioactive substances.
Packaging	Schedule 4

Section 8: Exposure Control/Personal Protection

Workplace exposure standards	No WESs are set for this product.
Application in the workplace	Ensure adequate ventilation. Keep container sealed when not in use.
Exposure standards outside the workplace	TEL – not applicable
Personal protection	Wear chemical resistant gloves, facemask or goggles.

Section 9: Physical and Chemical Properties

Appearance	Yellow liquid
Boiling Point	103°C
Melting/Softening point	Not determined
Vapour Pressure	67 hPA @ 20°C, 1013 hPA @ 101°C
Specific Gravity	Approx. 1.063
Solubility (H ₂ O)	Not determined for mixture
Percent Volatiles	Not determined
Flash Point	2°C
Evaporation Rate	Not determined

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Section 10: Stability and Reactivity

Stability of the substance	Stable under normal conditions. No hazardous reactions known.
Conditions to avoid	Keep away from heat, sparks, open flame and direct sunlight.
Material to avoid	Avoid food products.
Hazardous decomposition products	No dangerous decomposition is expected if used according to manufacturer's specifications.

Section 11: Toxicological Information

Acute effects for individual ingredients only

ORAL	Fluralaner: LD50 >2000 mg/kg (rat); Dimethylacetamide: LD50 2250–10,000 mg/kg (rat); 2600–4900 mg/kg (mouse) Acetone: Oral LD50: 5800 mg/kg (rat)
DERMAL	Fluralaner: LD50 >2000 mg/kg (rat); Dimethylacetamide: LD50: 2200-5000 mg/kg (rabbit), 7500 mg/kg (rat) <940 mg/kg (guinea pig) Acetone was mildly irritating to the skin of rabbits when dosed at 500 mg for 24 hours in a Standard Draize Test. DEET caused minimal to moderate transient dermal irritation in animals, which cleared by day 7.
EYE	Dimethylacetamide produced mild, reversible corneal injury in the eyes of rabbits, mice and dogs. Acetone was moderately irritating to rabbit eyes when dosed at 20 mg for 24 24 hours in a Standard Draize Test.
TEL	No TEL is set for this substance at this time.

Chronic/long term effects for individual ingredients only

Dimethylacetamide was given to rats and rabbits either orally, dermally or by inhalation. Dimethylacetamide caused fetal death or growth retardation in rats at an inhalation dose level of 282 ppm, but not at 100 ppm. There was not an increase in birth defects seen in this study, even at doses toxic to the dam. At high inhalation doses (2000 – 2500 ppm) in rats and (300 – 480 ppm) in mice, dimethylacetamide was associated with reversible testicular toxicity.

Section 12: Environmental Information

Effects for individual ingredients only

AQUATIC	Fluralaner: 96-hr LC50 (Common carp): 2 mg/L 48-hr EC50 (Daphnia magna): 0.0001 - 0.01 mg/L 72-hr EC50 (P. subcapitata): >10 mg/L DEET: 96-hr LC50 (Rainbow Trout): 75 mg/L 48-hr EC50 (Daphnia): 75 mg/L
EEL	Not applicable

SAFETY DATA SHEET

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Section 13: Disposal Considerations

Disposal information	Disposal of Product and Container Dispose of used pipette and sachet by wrapping with paper and putting in household waste or in a suitable landfill. Avoid contamination of any water source or the environment with product or empty container.
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Section 14: Transport Information

Relevant information	UN1090 Acetone solution. Class 3 Limited quantities/Consumer commodity 5L Tracking not required. UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isoxazoline derivative – Fluralaner and Diethyltoluamide (DEET)) Class 9 Limited quantities/Consumer commodity: 5L
Other requirements	Refer to Haznote.

Section 15: Regulatory Information

Regulatory status	ACVM Registration No: A11261 For conditions of registration see www.foodsafety.govt.nz HSNO Approval Code: HSR100757. For a full listing of controls see www.epa.govt.nz
HSNO and ACVM controls	Emergency Plan: 100L Signage: 100L

Section 16: Other Information

Additional information	Bravecto is a registered trademark.
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