


# Bravecto<sup>®</sup> Spot-On Solution

## Section 1: Identification of the Substance and Supplier

<b>Product name</b>	<b>Bravecto Spot-On Solution</b>
	This SDS relates to the following marketed products:  <b>Bravecto Spot-On Solution for Small Cats (1.2 – 2.8 kg)</b> <b>Bravecto Spot-On Solution for Medium-Sized Cats (&gt;2.8 – 6.25 kg)</b> <b>Bravecto Spot-On Solution for Large Cats (&lt;6.25 – 12.5 kg)</b> <b>Bravecto Spot-On Solution for Very Small Dogs (2 – 4.5 kg)</b> <b>Bravecto Spot-On Solution for Small Dogs (&gt;4.5 – 10 kg)</b> <b>Bravecto Spot-On Solution for Medium-Sized Dogs (&gt;10 – 20 kg)</b> <b>Bravecto Spot-On Solution for Large Dogs (&gt;20 – 40 kg)</b> <b>Bravecto Spot-On Solution for Very Large Dogs (&gt;40 – 56 kg)</b>
<b>Recommended use</b>	For spot-on flea and tick treatment in cats and dogs
<b>Company details</b>	<b>Schering-Plough Animal Health Ltd</b> <b>33 Whakatiki Street, Upper Hutt 5018, New Zealand</b>  <b>Phone: 0800 800 543 – Fax: 0800 808 100</b> <b>Website: <a href="http://www.msd-animal-health.co.nz">www.msd-animal-health.co.nz</a></b> <b>Hours: 8 am – 5 pm, Mon – Fri</b>
<b>Emergency telephone</b>	<b>0800 764 766 (0800 POISON) 24 hours human health</b> <b>0800 243 622 (0800 CHEMCALL) 24 hours</b>
<b>Date of preparation</b>	April 2019

## Section 2: Hazards Identification

<b>Hazard classifications</b>	3.1B: Flammable Liquids: high hazard 6.1E: Acutely toxic (oral and dermal) 6.3A: Skin irritant 6.4A: Eye irritant 6.8A: Reproductive/developmental toxicant 9.1A: Aquatic ecotoxicant
<b>GHS Pictogram:</b>	
<b>Signal word</b>	Danger
<b>Hazard statement</b>	H225: Highly flammable liquid and vapour. H303: May be harmful if swallowed. H313: May be harmful in contact with skin. H315: Causes skin irritation. H320: Causes eye irritation. H360: May damage fertility or the unborn child. H410: Very toxic to aquatic life with long lasting effects.
<b>Prevention statement</b>	P102: Keep out of reach of children. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. P264: Wash thoroughly after handling. P273: Avoid release to the environment. P280: Wear protective gloves, protective clothing and eye or face protection. P281: Use personal protective equipment as required.

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<b>Response statement</b>	<p>P101: If medical advice is needed, have product container or label at hand.</p> <p>P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P312: Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P321: See first aid instruction on the label of the product.</p> <p>P332 + P313: If skin irritation occurs: Get medical advice/ attention.</p> <p>P337 + P313: If eye irritation persists: Get medical advice/attention.</p> <p>P362: Take off contaminated clothing and wash before re-use.</p> <p>P370 + P378: In case of fire: Use Carbon dioxide (CO<sub>2</sub>), extinguishing powder or water spray.</p> <p>P391: Collect spillage.</p>
<b>Storage</b>	P405: Store locked up.
<b>Disposal</b>	P501: Dispose of product, packaging and waste at an approved landfill or other approved facility.

## Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration
Fluralaner	846731-61-3	28%
Dimethylacetamide (DMA)	127-15-5	30 – 40%
Diethyltoluamide (DEET)	134-62-3	10 - 20%
Acetone	67-64-1	10 – 20%

## Section 4: First Aid Measures

<b>Necessary first aid measures</b>	<p><b>SKIN CONTACT</b> 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 (e.g. rubbing alcohol or alcohol-based skin disinfectant gel). If irritation or symptoms occur or persist, consult a doctor.</p> <p><b>EYE CONTACT</b> 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.</p> <p><b>INGESTION</b> 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.</p> <p><b>INHALATION</b> Remove affected person promptly to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased.</p>
<b>Required instructions</b>	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.
<b>Workplace facilities</b>	Emergency showers and eyewashes may be warranted depending on quantity and type of use.

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## Section 5: Fire Fighting Measures

<b>Type of hazard</b>	Flammable (contains Acetone and Dimethylacetamide (DMA))
<b>Fire hazard properties</b>	Burning can produce carbon monoxide and/or carbon dioxide
<b>Regulatory requirements</b>	Two fire extinguishers are required where quantities greater than 250 L are present.
<b>Extinguishing media and methods</b>	Carbon dioxide (CO <sub>2</sub> ), extinguishing powder or water spray.
<b>Hazchem code</b>	2YE (Contain spillage)
<b>Recommended protective clothing</b>	Wear full protective clothing and self-contained breathing apparatus (SCBA).

## Section 6: Accidental Release Measures

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Environmental Precautions</b>	Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes. Avoid release to the environment.
<b>Emergency procedures</b>	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.

## Section 7: Handling and Storage

<b>Precautions for safe handling</b>	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.
<b>Regulatory requirements</b>	Signage required where quantities greater than 100 L are present. Emergency Plan required where quantities greater than 100 L are present. Location certificate required where quantities greater than 100 L are present. Hazardous Atmosphere Zone applicable where quantities greater than 100 L are present.
<b>Handling practices</b>	Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.
<b>Certified handlers</b>	Not required.
<b>Conditions for safe storage</b>	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.
<b>Store site requirements</b>	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.
<b>Packaging</b>	PG II

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## Section 8: Exposure Control/Personal Protection

<b>Occupational exposure limits</b>	No WESs are set for this product.
<b>Application in the workplace</b>	Ensure adequate ventilation. Keep container sealed when not in use.
<b>Exposure standards outside the workplace</b>	TEL – not applicable
<b>Personal protection</b>	Wear chemical resistant gloves, facemask or goggles.
<b>Engineering controls</b>	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 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 <sub>2</sub> O)	Not determined for mixture
Percent Volatiles	Not determined
Flash Point	2°C
Evaporation Rate	Not determined

## Section 10: Stability and Reactivity

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

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## 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 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	No EEL is set for this substance at this time.

## Section 13: Disposal Considerations

### Disposal information

#### Disposal

Dispose of unused contents in a suitable landfill. Where possible, dispose of unused product through AgRecovery Chemicals. Avoid contamination of any water source or the environment with product or empty container.

#### Container Disposal

Dispose of empty container by puncturing and burying in a suitable landfill. Where possible, recycle through AgRecovery. Do NOT burn.



### Reference

Current version of NZS 8409 Management of Agrichemicals

# SAFETY DATA SHEET

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### Section 14: Transport Information

UN Number	UN1090
UN proper shipping name	Acetone solution
UN dangerous goods class and subsidiary risk	3, 9
UN Packaging Group	PG II
Environmental hazards	Marine pollutant
Special precautions when transporting the substance	 

### Section 15: Regulatory Information

Regulatory status	ACVM Registration No: A11261 For conditions of registration see <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a>  HSNO Approval Code: HSR100757. For a full listing of controls see <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>
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### Section 16: Other Information

**Additional information** Bravecto is a registered trademark.

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