

# SAFETY DATA SHEET

Mortein Barrier Outdoor Surface Spray Aerosol



HEALTH • HYGIENE • HOME

## 1. Identification of the material and supplier

### Names

**Product name** : Mortein Kill & Protect Barrier Outdoor Surface Spray Aerosol

**SDS no.** : D0137475 v3.0

**Formulation #** : 0211437 v1.0

### Supplier

: AUSTRALIA  
Reckitt Benckiser (Australia) Pty Limited  
ABN: 17 003 274 655  
680 George Street, Sydney NSW 2000  
Tel: +61 (0)2 9857 2000

NEW ZEALAND  
Reckitt Benckiser (New Zealand) Limited  
2 Fred Thomas Drive, Takapuna,  
Auckland, New Zealand 0622  
Tel: +64 9 484 1400

**Poison Information contact:** : Australia - 13 11 26  
New Zealand - 0800 764 766 or 0800 POISON

**Material uses** : Household insecticide aerosol spray

**Product use** : Consumer

## Section 2. Hazard(s) identification

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas

### GHS label elements

**Hazard pictograms** :



**Signal word** : **DANGER**

**Hazard statements** : **Extremely flammable aerosol.**  
**Contains gas under pressure; may explode if heated.**

### Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.

**Response** : Not applicable.

**Storage** : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

**Disposal** : Not applicable.

**Supplemental label elements** : Not applicable.

## Section 2. Hazard(s) identification

**Other hazards which do not result in classification** : None known.

## Section 3. Composition and ingredient information

**Substance/mixture** : Mixture

Ingredient name	% (w/w)	CAS number
Butane	≥30 - ≤60	106-97-8
propane	≤10	74-98-6

Supplier's information : Product Contains less than 0,1% w/w 1, 3 Butadiene

**Other Non-hazardous ingredients to 100%**

**Occupational exposure limits, if available, are listed in Section 8.**

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

## Section 4. First aid measures

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Hazchem code** : 2YE

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and material for containment and cleaning up

**Date of issue** : 14/12/2016

**Page:** 3/11

## Section 6. Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

- Do not store above the following temperature** : 50 °C

## Section 8. Exposure controls and personal protection

### Control parameters

#### Australia

### Occupational exposure limits

Ingredient name	Exposure limits
Butane	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 1900 mg/m <sup>3</sup> 8 hours. TWA: 800 ppm 8 hours. <b>TRGS900 AGW (Germany, 12/2014).</b> TWA: 1800 mg/m <sup>3</sup> 8 hours. PEAK: 7200 mg/m <sup>3</sup> 15 minutes. TWA: 1000 ppm 8 hours. PEAK: 4000 ppm 15 minutes.
propane	

## Section 8. Exposure controls and personal protection

### New Zealand

<b>Ingredient name</b>	<b>Exposure limits</b>
Ethanol	<b>NZ OSH (New Zealand, 12/2010).</b> WES-TWA: 1000 ppm 8 hour(s). WES-TWA: 1880 mg/m <sup>3</sup> 8 hour(s).
2,6-Di-tert-butyl-p-cresol	<b>NZ OSH (New Zealand, 9/2010).</b> WES-TWA: 10 mg/m <sup>3</sup> 8 hour(s).

**Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Aerosol.
<b>Colour</b>	: Clear.
<b>Odour</b>	: Floral. Nota,Alcohol-like.
<b>Odour threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: <10.1°C (<50.2°F)
<b>Flash point</b>	: Closed cup: -60°C (-76°F) [Butane]
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.
<b>Vapour pressure</b>	: 240 kPa (1800.15 mm Hg) [20°C]Butane
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: Not available.
<b>Solubility</b>	: Insoluble in the following materials: cold water and hot water.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Flow time (ISO 2431)</b>	: Not available.
<b>Type of aerosol</b>	: Spray
<b>Heat of combustion</b>	: 18.21 kJ/g

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: Avoid all possible sources of ignition (spark or flame).
<b>Incompatible materials</b>	: No specific data.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

## Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Butane Mortein Barrier Outdoor Surface Spray Aerosol_FF0211437 (D0137475) ANZ	LC50 Inhalation Vapour	Rat	658000 mg/m <sup>3</sup>	4 hours
	LC50 Inhalation Dusts and mists	Rat	>5.45 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg Body weight:	-
	LD50 Oral	Rat	>2000 mg/kg Body weight:	-

**Conclusion/Summary** : \*Not classified Harmful.\*Information is based on toxicity test result of the concentrate of a similar product.

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Mortein Barrier Outdoor Surface Spray Aerosol_FF0211437 (D0137475) ANZ	Skin - Non-irritant to skin.	Rabbit	0	-	-
	Eyes - Cornea opacity	Rabbit	0	-	-

### Conclusion/Summary

**Skin** : \* Non-irritant to skin. Information is based on toxicity test result of the concentrate of a similar product.

**Eyes** : \*Mildly irritating to the eyes. Information is based on toxicity test result of the concentrate of a similar product.

**Respiratory** : Based on available data, the classification criteria are not met.

### Sensitisation

Product/ingredient name	Route of exposure	Species	Result
Mortein Barrier Outdoor Surface Spray Aerosol_FF0211437 (D0137475) ANZ	skin	Mouse	Not sensitizing

### Conclusion/Summary

**Skin** : \* Non-sensitiser. Information is based on toxicity test result of the concentrate of a similar product.

**Respiratory** : Based on available data, the classification criteria are not met.

### Mutagenicity

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Reproductive toxicity

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Teratogenicity

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Not available.

## Section 11. Toxicological information

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
irritation  
redness  
**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.  
**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.



## Section 12. Ecological information

### Toxicity

Not available.

**Conclusion/Summary** : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Butane	2.89	-	low
propane	1.09	-	low

### Mobility in soil






**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## 14. Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADG</b>	UN1950	AEROSOLS	2.1	-		<b>Hazchem code</b> 2YE <b>Special provisions</b> 63, 190, 277, 327
<b>IMDG</b>	UN1950	AEROSOLS. Marine pollutant (reaction mass of: [2,4-dioxo-(2-propyn-1-yl)imidazolidin-3-yl]methyl (1R)-cis-chrysanthemate; [2,4-dioxo-(2-propyn-1-yl)imidazolidin-3-yl]methyl (1R)-trans-chrysanthemate)	2.1	-	 	<b>Emergency schedules (EmS)</b> F-D, S-U <b>Special provisions</b> 63, 190, 277, 327, 959, 344
<b>IATA</b>	UN1950	Aerosols, flammable	2.1	-	 	<b>See DG List.</b>

## 14. Transport information

PG\* : Packing group

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

### Standard Uniform Schedule of Medicine and Poisons

Australia - Not scheduled

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

**Australia inventory (AICS)** : Not applicable  
**New Zealand Inventory of Chemicals (NZIoC)** : Not applicable  
**HSNO Group Standard** : Pesticide.  
**HSNO Approval Number** : ERMA Approval Number: HSR000059.  
**Approved Handler Requirement** : Yes. Approved handler required when greater than 3000L (aggregate water capacity) of 2.1.2A substances are present.  
**Tracking Requirement** : No.

This product has been approved by:- APVMA, Australia ; APVMA No.62677

## Section 16. Any other relevant information

**Key to abbreviations** : ADG = Australian Dangerous Goods  
 ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 NOHSC = National Occupational Health and Safety Commission  
 SUSMP = Standard Uniform Schedule of Medicine and Poisons  
 UN = United Nations

**Date of issue / Date of revision** : 14/12/2016

**Revision comments** : Update as per AUS GHS SDS.

**Version** : 3

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	On basis of test data

**References** : Not available.

✔ Indicates information that has changed from previously issued version.

### Notice to reader

## **Section 16. Any other relevant information**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Please read all labels carefully before using product.