This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (Feb 2016).

SAFETY DATA SHEET



Mortein Fast Knockdown Multi Insect Killer Aerosol

1. Identification of the material and supplier

<u>Names</u>	
Product name	Mortein Fast Knockdown Multi Insect Killer Aerosol
SDS no.	: D0146683 v7.0L
Formulation #	: 0145172 v1.0 8054022 v1.0 8058011 v1.0 8182162 v1.0 8058308 v1.0 0242598 v1.0
Supplier	:AUSTRALIA RB (Hygiene Home) Australia Pty Ltd ABN: 58 629 549 506 680 George St , Sydney, NSW 2000 Tel: +61 (0)2 9857 2000 NEW ZEALAND RB (Hygiene Home) New Zealand Limited Company number: 7097753 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
Product use	: Consumer
Sizes	: 200 g, 300 g, Aerosol Can

Section 2. Hazard(s) identification

Classification of the substance or mixture	:	FLAMMABLE AEROSOLS - Category 1 GASES UNDER PRESSURE - Compressed gas SKIN CORROSION/IRRITATION - Category 2
HSNO Classification		: 2.1.2A, 6.3B, 9.1A, 9.4C
GHS label elements		
Hazard pictograms	:	
Signal word	:	DANGER
Hazard statements	:	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation.
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.

Section 2. Hazard(s) identification

Prevention	: Wear protective gloves. 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. Wash hands thoroughly after handling.
Response	: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention.
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.

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

Section 3. Composition and ingredient information

Substance/mixture : Mixture		
Ingredient name	% (w/w)	CAS number
Butane propane Esbiothrin	≥60 - ≤75 ≥10 - ≤30 _{0.1}	106-97-8 74-98-6 84030-86-4
Permethrin	0.03	52645-53-1
Imiprothrin	0.02	72963-72-5

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 fi	rst 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.
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. Continue to rinse for at least 10 minutes. Get medical attention. 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

Section 4. First aid measures

Section 4. First al	
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/symp	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate med	dical 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

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 spill 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 control cont	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.

Section 7. Handling and storage

Conditions for safe storage,	1	Do not store above the following temperature: 50°C (122°F). Store in accordance
including any		with local regulations. Store away from direct sunlight in a dry, cool and well-
incompatibilities		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	÷	50 °C

following temperature

Section 8. Exposure controls and personal protection

Control parameters

<u>Australia</u>

Occupational exposure limits

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

New Zealand

Ingredient name	Exposure limits
butane	NZ OSH (New Zealand, 2/2013). WES-TWA: 800 ppm 8 hours. WES-TWA: 1900 mg/m ³ 8 hours.

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 measu	<u>ires</u>
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: chemical splash goggles.
Skin protection	

Section 8. Exposure controls and personal 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

<u>Appearance</u>		
Physical state	:	Liquid. [Liquefied compressed gas.]
Colour	1	Colourless.
Odour	1	Citrus, Fruity.
Odour threshold	1	Not available.
рН	1	Not available.
Melting point	1	Not available.
Boiling point	1	0°C (32°F)
Flash point	1	Closed cup: <0°C (<32°F)
Evaporation rate	1	Not available.
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Vapour pressure	:	Not available.
Vapour density	:	Not available.
Relative density	:	0.7 to 0.8
Solubility	:	Insoluble in the following materials: cold water and hot water.
Solubility in water	1	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	1	Not available.
Decomposition temperature	1	Not available.
Viscosity	:	Not available.
Flow time (ISO 2431)	:	Not available.
Type of aerosol	;	Spray

Section 10. Stability and reactivity

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
utane LC50 Inhalation Vapour LC50 Inhalation Dusts and mists MIK D0146683 (ANZ)		Rat Rat	658000 mg/m³ >4.81 mg/l	4 hours 4 hours
	LD50 Dermal LD50 Oral	Rat Rat - Female	>2000 mg/kg >2500 mg/kg	-

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 Fast Knockdown _MIK D0146683 (ANZ)	Eyes - Redness of the conjunctivae	Rabbit	0.3	60 minutes	72 hours
	Skin - Moderate irritant	Rabbit	-	-	14 days

Conclusion/Summary

Skin	Irritating to skin. Information is based on toxicity test result	of the concentrate.
Eyes	Non-irritating to the eyes. Information is based on toxicity te	est result of the

: * Non-irritating to the eyes. Information is based on toxicity test result of the concentrate.

Respiratory

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

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
Mortein Fast Knockdown _MIK D0146683 (ANZ)	skin	Rat	Not sensitizing
Conclusion/Summary	-		
Skin		er to skin. Information is based o a similar product.	on toxicity test result of the
Respiratory	: Based on avai	Based on available data, the classification criteria are not met.	

Respiratory Mutagenicity

Not available.

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

Date of issue

Section 11. Toxicological information

Carcinogenicity Not available. Conclusion/Summary

ary : 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.

Specific target organ toxicity (repeated exposure) Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure	1	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	1	Causes skin irritation.
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: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

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

<u>Short term exposure</u>	
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 eff	ects
Not available.	

Date of issue

Section 11. Toxicological information

Conclusion/Summary	1	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

Product/ingredient name	Result	Species	Exposure
Mortein Dual AIK Aerosol (Perm) Sunny Blitz D0146683 (ANZ)	Acute EC50 47.11 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
_ 、 ,	Acute EC50 1.38 mg/l Fresh water Acute LC50 5.24 mg/l Fresh water	Daphnia - Daphnia magna Fish - Danio rerio	48 hours 96 hours
Conclusion/Summary : * Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic organisms.		n the aquatic	

 * Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Information is based on toxicity test result of the concentrate of a similar product.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Butane	2.89	-	low
propane	1.09	-	low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

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 nonrecyclable 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. D0146683

14. Transport information						
Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADG	UN1950	AEROSOLS	2.1	-	PLAIMABLE Ga	Hazchem code 2YE Special provisions 63, 190, 277, 327
IMDG	UN1950	AEROSOLS. Marine pollutant (esbiothrin)	2.1	-		The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-D, S-U Special provisions 63, 190, 277, 327, 959, 344
ΙΑΤΑ	UN1950	Aerosols, flammable	2.1	-		The environmentally hazardous substance mark may appear if required by other transportation regulations. Passenger and Cargo Aircraft Quantity limitation: 75 kg Packaging instructions: 203 Cargo Aircraft Only Quantity limitation: 150 kg Packaging instructions: 203 Limited Quantities - Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: Y203 Special provisions A145, A167, A802

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 Safe	ety Regulations - Scheduled Substances	
No listed substance Australian Pesticides and Veterinary Medicines Authority (APVMA)	: 69354	
Australia inventory (AICS)	All components are listed or exempted.	
New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.	
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Section 15. Regulatory information

HSNO Group Standard	: Pesticide. Flammable Aerosols
HSNO Approval Number	:HSR 100608
Approved Handler Requirement	: No.
Tracking Requirement	: No.

Section 16. Any other relevant information

N	
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 = Internediate 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	: AUS GHS SDS
Version	: 7.0L
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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
SKIN CORROSION/IRRITATION - Category 2	On basis of test data

References

: Not available.

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.