

Safety Data Sheet



Coopex® Residual Insecticide

Version 2 / AUS
102000002907

Revision Date: 10.09.2018
Print Date: 10.09.2018

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Trade name Coopex® Residual Insecticide
Product code (UVP) 05943760

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use Insecticide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer Cropscience Pty Ltd
ABN 87 000 226 022
Level 1, 8 Redfern Road
3123 Hawthorn East
Victoria
Australia

Telephone (03) 9248 6888

Telefax (03) 9248 6800

Responsible Department 1800 804 479 Technical Information Service

Website www.environmentalscience.bayer.com.au

1.4 Emergency telephone no.

Emergency telephone no. 1800 033 111 IXOM Operations Pty Ltd

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Australian GHS Regulation

Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

Permethrin

2.3 Other hazards

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours). May form explosible dust-air mixture if dispersed.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS



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Chemical nature

Permethrin 25%
Wettable powder (WP)

Chemical name	CAS-No.	Concentration [%]
Permethrin	52645-53-1	25.00
Sodium diisopropyl naphthalene sulphonate	1322-93-6	>= 1.00 - < 3.00
naphthalenesulfonic acid-formaldehyde-polycondensate as sodium salt	36290-04-7	> 1.00 - < 25.00
Kaolin	1332-58-7	> 1.00
Diatomaceous earth	61790-53-2	> 1.00
Other ingredients (non-hazardous) to 100%		

SECTION 4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.

4.1 Description of first aid measures

General advice	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
Inhalation	Move to fresh air. Move the victim to fresh air and keep at rest. Call a physician or poison control center immediately.
Skin contact	Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.
Ingestion	Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	Local:, Skin and eye paraesthesia which may be severe, Usually transient with resolution within 24 hours, Skin, eye and mucous membrane irritation, Cough, Sneezing Systemic:, discomfort in the chest, tachycardia, Hypotension, Nausea, Abdominal pain, Diarrhoea, Vomiting, Dizziness, Blurred vision, Headache, Anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, Pulmonary oedema, Palpitation, Muscular fasciculation, Apathy
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4.3 Indication of any immediate medical attention and special treatment needed

Risks	This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.
Treatment	Local treatment: Initial treatment: symptomatic. Systemic treatment: Initial treatment: symptomatic. Monitor: respiratory and cardiac functions. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Keep respiratory tract clear. Oxygen or artificial respiration if needed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not effective, phenobarbital may be used. Contraindication: atropine. Contraindication: derivatives of adrenaline. There is no specific antidote. Recovery is spontaneous and without sequelae. In case of skin irritation, application of oils or lotions containing vitamin E may be considered.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

5.3 Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code 2Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Avoid dust formation. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

6.2 Environmental precautions Retain and dispose of contaminated wash water. Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.



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6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Avoid dust formation and electrical charging (sparking) because dust explosion might occur. Use mechanical handling equipment. Clean contaminated floors and objects thoroughly, observing environmental regulations. Collect and transfer the product into a properly labelled and tightly closed container.

6.4 Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling Avoid dust formation. Ensure adequate ventilation.

Advice on protection against fire and explosion Dust may form explosive mixture in air. Keep away from heat and sources of ignition.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep away from direct sunlight. Protect from frost.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

Suitable materials Aluminium composite film (min. 0,007 mm Aluminium)

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Permethrin	52645-53-1	5 mg/m ³ (TWA)	12 2011	AU NOEL
Permethrin	52645-53-1	10 mg/m ³ (SK-SEN)		OES BCS*
Kaolin (Inhalable dust.)	1332-58-7	10 mg/m ³ (TWA)	12 2011	AU NOEL
Diatomaceous earth (Inhalable dust.)	61790-53-2	10 mg/m ³ (TWA)	04 2013	AU NOEL

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

8.2 Exposure controls



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Respiratory protection

Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0.4 mm
Directive	Protective gloves complying with EN 374.

Eye protection

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection

Wear standard coveralls and Category 3 Type 5 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

Engineering Controls

Advice on safe handling

Avoid dust formation. Ensure adequate ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	powder
Colour	white to light grey
Bulk density	ca. 0.500 g/ml (bulk density tapped)
Water solubility	miscible
Partition coefficient: n-octanol/water	Permethrin: log Pow: 5.95

9.2 Other information

Further safety related physical-chemical data are not known.



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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition Stable under normal conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid Extremes of temperature and direct sunlight.

10.5 Incompatible materials Store only in the original container.

10.6 Hazardous decomposition products No decomposition products expected under normal conditions of use.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 2,000 mg/kg

Acute inhalation toxicity LC50 (Rat) > 4.10 mg/l
Exposure time: 4 h
Determined in the form of a respirable fine dust.
Highest attainable concentration.

Acute dermal toxicity LD50 (Rat) > 1,000 mg/kg

Skin corrosion/irritation No skin irritation (Rabbit)

Serious eye damage/eye irritation Slight irritant effect - does not require labelling. (Rabbit)

Respiratory or skin sensitisation Non-sensitizing. (Guinea pig)
OECD Test Guideline 406, Magnusson & Kligman test

Assessment mutagenicity

Permethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Permethrin caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver, Lungs. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.

Assessment toxicity to reproduction

Permethrin did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Permethrin did not cause developmental toxicity in rats and rabbits.

Assessment STOT Specific target organ toxicity – single exposure

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

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Assessment STOT Specific target organ toxicity – repeated exposure

Permethrin did not cause specific target organ toxicity in experimental animal studies.

Aspiration hazard

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

Early onset symptoms related to exposure

Refer to Section 4

Delayed health effects from exposure

Refer to Section 11

Exposure levels and health effects

Refer to Section 4

Interactive effects

Not known

When specific chemical data is not available

Not applicable

Mixture of chemicals

Refer to Section 2.1

Further information

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).
The toxicological data refer to a similar formulation.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	LC50 (Poecilia reticulata (guppy)) 0.0076 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient permethrin.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.00017 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient permethrin.
Toxicity to aquatic plants	EC50 (Pseudokirchneriella subcapitata (microalgae)) 0.497 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient permethrin.

12.2 Persistence and degradability

Biodegradability Permethrin:
Not rapidly biodegradable

Koc Permethrin: Koc: 100000

12.3 Bioaccumulative potential

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Bioaccumulation Permethrin: Bioconcentration factor (BCF) 300
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Permethrin: Immobile in soil

12.5 Other adverse effects

Additional ecological information No other effects to be mentioned.

SECTION 13. DISPOSAL CONSIDERATIONS

Plastic and foil bags:

Single rinse before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Puncture and bury empty bags in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty bags and product should not be burnt.

Box

Dispose of empty container by wrapping in paper, placing in plastic bag and putting in the garbage. DO NOT burn empty containers or product.

SECTION 14. TRANSPORT INFORMATION

ADG

UN number	3077
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE)
Hazchem Code	2Z

According to AU01, Environmentally Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

IMDG

UN number	3077
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Marine pollutant	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE)

IATA

UN number	3077
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Environm. Hazardous Mark	YES

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Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(PERMETHRIN MIXTURE)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 32843

SUSMP classification (Poison Schedule)

Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 16. OTHER INFORMATION

Trademark information Coopex® is a Registered Trademark of the Bayer Group.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
AU OEL	Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)
CAS-Nr.	Chemical Abstracts Service number
CEILING	Ceiling Limit Value
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
OES BCS	OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"
PEAK	PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of

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	time which does not exceed 15 minutes.
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SK-SEN	Skin sensitiser
SKIN_DES	SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.
STEL	STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TWA	TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.
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