

# Bayer Environmental Science

## Material Safety Data Sheet

### Crackdown® Residual Insecticide



Version / AUS  
102000014058

Revision Date 15.09.2011

#### SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: **Crackdown® Residual Insecticide**  
Other names: None  
Product code (UVP): 06068855  
Recommended use: Insecticide

Chemical formulation: Suspo-emulsion (SE)

Company: Bayer Environmental Science  
A Business Operation of Bayer CropScience Pty Ltd  
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Emergency telephone no.: 1800 033 111 Orica SH&E Shared Services

#### SECTION 2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE	Emergency Overview	DANGEROUS GOODS
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Hazardous classification: Hazardous (National Occupational Health and Safety Commission - NOHSC).

R-phrases: R43 - May cause sensitization by skin contact.

S-phrases: See sections 4, 5, 6, 7, 8, 10, 13.

ADG Classification: Not a "Dangerous good" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. For transport by sea, Crackdown Residual Insecticide is a MARINE POLLUTANT. See Section 14.

SUSMP classification (Poison Schedule): Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Deltamethrin 10g/L, d-Tetramethrin 20:80 10g/L, Piperonyl butoxide 80g/L

Chemical Name	CAS-No.	Concentration [%]
Deltamethrin	52918-63-5	0.99
Tetramethrin	7696-12-0	0.99
Piperonyl butoxide	51-03-6	7.97
1,2-Propanediol	57-55-6	5.68

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Mixture of 5-Chlor-2-methyl-3(2H)-isothiazolon and 2-Methyl-2H-isothiazol-3-on	55965-84-9	0.02
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 Material Safety Data Sheet to the doctor.**

**Inhalation**

Move the victim to fresh air and keep at rest.

**Skin contact**

Take off contaminated clothing and shoes immediately. Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If signs of poisoning occur, call a physician immediately.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Eye treatment by an ophthalmologist.

**Ingestion**

Rinse mouth. Do NOT induce vomiting. Keep at rest. Obtain medical attention. Call a physician or poison control center immediately.

**Notes to physician**

**Symptoms**

Burning sensation, airway hyperreaction, pulmonary oedema, tachycardia, hypotension, palpitation, nausea, vomiting, diarrhoea, abdominal pain, salivation, dizziness, blurred vision, headache, anorexia, somnolence, coma, seizures, convulsions, tremors, ataxia, muscular fasciculation.

**Treatment**

Treat symptomatically.  
Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.  
ECG - monitoring (Electrocardiogram).  
Contraindication: atropine.

**SECTION 5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media**

- Water spray
- Carbon dioxide (CO<sub>2</sub>)
- Foam
- Dry chemical

**Extinguishing media which should not be used for safety reasons**

- High volume water jet



**Hazards from combustion products**

In the event of fire the following may be released:

- Carbon monoxide (CO)
- Carbon dioxide (CO<sub>2</sub>)
- nitrogen oxides (NO<sub>x</sub>)
- Hydrogen chloride (HCl)
- Hydrogen cyanide (hydrocyanic acid)

**Precautions for fire-fighting**

- Wear self-contained breathing apparatus and protective suit.
- Cool closed containers exposed to fire with water spray.
- Whenever possible, contain fire-fighting water by diking area with sand or earth.
- Do not allow run-off from fire fighting to enter drains or water courses.

**Hazchem Code** •3Z

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

- An emergency shower must be readily accessible to the work area.
- Use personal protective equipment.
- Avoid contact with spilled product or contaminated surfaces.
- Keep unauthorized people away.

**Environmental precautions**

- Do not allow to get into surface water, drains and ground water.
- Contain contaminated water and fire fighting water.
- If the product contaminates rivers and lakes or drains inform respective authorities.

**SECTION 7. HANDLING AND STORAGE**

**Handling**

- Hygiene measures:
  - Avoid contact with skin, eyes and clothing.

**Storage**

- Requirements for storage areas and containers:
  - Keep out of the reach of children.
  - Keep containers tightly closed in a dry, cool and well-ventilated place.
  - Keep away from direct sunlight.
  - Protect from frost.

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Components with workplace control parameters:**

Components	CAS-No.	Control parameters	Update	Basis
Deltamethrin	52918-63-5	0.02 mg/m <sup>3</sup>		OES BCS*
Propylene glycol	57-55-6	10 mg/m <sup>3</sup> mist		Manufacturer

\*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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#### Personal protective equipment - End user

General advice: Eye wash facility and safety shower should be available.  
Keep and wash PPE separately from other laundry.

Hand protection: Elbow-length PVC or nitrile gloves.

Eye protection: Face-shield.

Skin and body protection: Cotton overall buttoned to the neck and wrist.  
Washable hat.

#### Engineering Controls

Advice on safe handling:  
Avoid contact with skin, eyes and clothing.  
Use only in area provided with appropriate exhaust ventilation.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

Form: Liquid  
Colour: White  
Odour: No data available

#### Safety data

pH: No data available

Flash point: No data available

Ignition temperature: No data available

Upper explosion limit: No data available

Lower explosion limit: No data available

Vapour pressure: No data available

Relative vapour density: No data available

Density: ca. 1.00 g/cm<sup>3</sup> at 20 °C

Water solubility: No data available

Partition coefficient: n-octanol/water: No data available

### SECTION 10. STABILITY AND REACTIVITY

Materials to avoid: Oxidizing agents  
Strong acids  
Bases  
Iron



Hazardous decomposition products:

Thermal decomposition can lead to release of:  
oxides of carbon  
nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride (HCl)  
Hydrogen cyanide (hydrocyanic acid)

## SECTION 11. TOXICOLOGICAL INFORMATION

### Potential health effects

Inhalation:	Avoid breathing spray mist. May cause irritation of the mucous membranes.
Skin:	Irritant. Can cause irritation to the skin resulting in effects such as burning and/or tingling sensation.
Eye:	May cause eye irritation.
Ingestion:	May be harmful if swallowed. May cause nausea, vomiting, abdominal pain.
Acute oral toxicity:	LD <sub>50</sub> (rat) > 10,000 mg/kg Test conducted with a similar formulation.
Acute oral toxicity:	LD <sub>50</sub> (rat) 7,500 mg/kg The value mentioned relates to the active ingredient piperonyl butoxide.
Acute oral toxicity:	LD <sub>50</sub> (rat) > 5,000 mg/kg The value mentioned relates to the active ingredient D-tetramethrin.
Acute oral toxicity:	LD <sub>50</sub> (rat) 135 to >5,000 mg/kg The value mentioned relates to the active ingredient deltamethrin.
Acute inhalation toxicity:	LC <sub>50</sub> (rat) 2.2 mg/L Exposure time: 4 h The value mentioned relates to the active ingredient deltamethrin.
Acute inhalation toxicity:	LC <sub>50</sub> (rat) 5.9 mg/L Exposure time: 4 h The value mentioned relates to the active ingredient piperonyl butoxide.
Acute inhalation toxicity:	LC <sub>50</sub> (rat) > 1,180 mg/L Exposure time: 3 h The value mentioned relates to the active ingredient D-tetramethrin.
Acute dermal toxicity:	LD <sub>50</sub> (rat) > 10,000 mg/kg Test conducted with a similar formulation.
Acute dermal toxicity:	LD <sub>50</sub> (rat) > 7,950 mg/kg The value mentioned relates to the active ingredient deltamethrin.
Acute dermal toxicity:	LD <sub>50</sub> (rat) > 5,000 mg/kg The value mentioned relates to the active ingredient D-tetramethrin.

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Acute dermal toxicity:	LD <sub>50</sub> (rabbit) > 2,000 mg/kg The value mentioned relates to the active ingredient piperonyl butoxide.
Skin irritation:	No skin irritation (rabbit). The value mentioned relates to the active ingredient deltamethrin.
Skin irritation:	No skin irritation (rabbit). The value mentioned relates to the active ingredient D-tetramethrin.
Eye irritation:	light irritation (rabbit). The value mentioned relates to the active ingredient deltamethrin.
Sensitisation:	Non-sensitizing (guinea pig). The value mentioned relates to the active ingredient deltamethrin.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects**

Toxicity to fish:	LC <sub>50</sub> (Fish) 0.001-0.01 mg/L Exposure time: 96 h The value mentioned relates to the active ingredient deltamethrin.
Toxicity to fish:	LC <sub>50</sub> ( <i>Lepomis macrochirus</i> (Bluegill sunfish)) 0.016 mg/L The value mentioned relates to the active ingredient tetramethrin.
Toxicity to fish:	LC <sub>50</sub> ( <i>Cyprinus carpio</i> (Carp)) 5.3 mg/L Exposure time: 24 h The value mentioned relates to the active ingredient piperonyl butoxide.
Toxicity to aquatic invertebrates:	LC <sub>50</sub> ( <i>Daphnia</i> ) 0.00035 mg/L Exposure time: 48 h The value mentioned relates to the active ingredient deltamethrin.
Toxicity to aquatic invertebrates:	LC <sub>50</sub> ( <i>Daphnia</i> ) 2.95 mg/L Exposure time: 24 h The value mentioned relates to the active ingredient piperonyl butoxide.
Toxicity to aquatic invertebrates:	EC <sub>50</sub> ( <i>Daphnia</i> ) 0.11 mg/L Exposure time: 48 h The value mentioned relates to the active ingredient tetramethrin.
Toxicity to aquatic plants:	EC <sub>50</sub> (96 h) (Algae) > 9.1 mg/L Exposure time: 96 h The value mentioned relates to the active ingredient deltamethrin.
Toxicity to aquatic plants:	EC <sub>50</sub> (Algae) 44 µmol/L The value mentioned relates to the active ingredient piperonyl butoxide.
Toxicity to other organisms:	LD <sub>50</sub> (Duck and Quail) > 5,000 mg/kg The value mentioned relates to the active ingredient deltamethrin.



- Toxicity to other organisms: LD<sub>50</sub> (Duck and Quail) > 10,000 mg/kg  
 The value mentioned relates to the active ingredient deltamethrin.
- Toxicity to other organisms: LD<sub>50</sub> (*Colinus virginianus* (Bobwhite quail)) > 2,250 mg/kg  
 The value mentioned relates to the active ingredient tetramethrin.
- Toxicity to other organisms: LD<sub>50</sub> (*Colinus virginianus* (Bobwhite quail)) > 2,250 mg/kg  
 The value mentioned relates to the active ingredient piperonyl butoxide.
- Toxicity to other organisms: LD<sub>50</sub> (*Apis mellifera* (bees)) (oral) 79 ng/bee  
 The value mentioned relates to the active ingredient deltamethrin.
- Toxicity to other organisms: LD<sub>50</sub> (*Apis mellifera* (bees)) (contact) 51 ng/bee  
 The value mentioned relates to the active ingredient deltamethrin.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Metal drums and plastic containers**

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers 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 containers and product should not be burnt.

**SECTION 14. TRANSPORT INFORMATION**

**ADG**

UN-Number	<b>3082</b>
Class	9
Subsidiary Risk	None
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN SOLUTION)
Hazchem Code	•3Z

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	<b>3082</b>
Class	9
Subsidiary Risk	None
Packaging group	III
EmS	F-A , S-F
Marine pollutant	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN SOLUTION)

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**IATA**

UN-Number	<b>3082</b>
Class	9
Subsidiary Risk	None
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN SOLUTION )

**SECTION 15. REGULATORY INFORMATION**

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994.

Australian Pesticides and Veterinary Medicines Authority approval number: 45907.

See also Section 2.

**SECTION 16. OTHER INFORMATION**

**Trademark information**

Crackdown® is registered trademark of Bayer.

This MSDS 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 MSDS 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.

END OF MSDS