

Version / NZ Revision Date 11.07.2017 102000022949

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Trade Name Temprid® 75 Residual Insecticide

Product code (UVP): 79726996

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

Bayer CropScience Pty Ltd Level 1, 8 Redfern Rd, Hawthorn East, Vic 3123 Australia

www.environmentalscience.bayer.com.au

New Zealand Agent

Bayer New Zealand Ltd

3 Argus Place, Hillcrest, Auckland,

0627 New Zealand

Telephone: 0800 428 246 Facsimile: (09) 441 8645

1.4 Emergency telephone no.

Emergency telephone no. 0800 734 607 IXOM Operations Pty Ltd (24 hr)

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with New Zealand Regulation

Hazardous classification: Classified as hazardous according to the criteria in the Hazardous

Substances (Minimum Degrees of Hazard) Regulations 2001.

Signal word: Warning

HSNO classifications 6.1D (All), 6.1D (I), 6.1D (O), 6.3B, 6.5B, 6.8C, 6.9B (All), 6.9B

(I), 6.9B (O), 9.1A (AII), 9.1A (M), 9.2B, 9.3B, 9.4A

Harmful if swallowed or inhaled. Causes mild skin irritation.

May cause an allergic skin reaction.

Contact with facial skin may cause temporary facial numbness.

May cause harm to breastfed children.

May cause damage to organs through prolonged or repeated

exposure.

Very toxic to aquatic life with long lasting effects.

Toxic to the soil environment.

Toxic to terrestrial vertebrates.

Very toxic to terrestrial invertebrates.



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Pictograms:



Classification in accordance with Australian GHS Regulation

Acute toxicity: Category 4 H332 Harmful if inhaled

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

Dangerous goods classification: "Dangerous goods" for transport according to NZS 5433:1999,

UN, IMDG or IATA - See Section 14.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Imidacloprid 50 g/L

Beta-cyfluthrin 25 g/L Suspension concentrate (SC)

| Chemical Name | CAS-No. | Concentration [%] |
|--|-------------|-------------------|
| Imidacloprid | 138261-41-3 | 4.63 |
| Beta-cyfluthrin | 68359-37-5 | 2.31 |
| Glycerine | 56-81-5 | > 10.00 - ≤ 30.00 |
| Sulfonated aromatic polymer, sodium salt | 68425-94-5 | > 1.00 - < 10.00 |
| 1,2-Benzisothiazol-3(2H)-one | 2634-33-5 | > 0.05 - < 1.00 |
| Other ingredients (non-hazardous) to 100 % | | |

SECTION 4. FIRST AID MEASURES

In case of poisoning by any exposure route contact the National Poisons and Hazardous Chemicals Information Centre, P.O. Box 913, Dunedin. Phone 0800 764 766, 0800 POISON 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. Keep patient warm and 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.



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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. Do not leave victim unattended. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

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, Blurred vision, Headache, anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, Pulmonary oedema, Palpitation, Muscular fasciculation, Apathy, Dizziness

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

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: Water spray, Carbon dioxide (CO2), Foam, Dry chemical

5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released:, Hydrogen chloride (HCI), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx).

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

Avoid contact with spilled product or contaminated surfaces. Contain the spread of the fire-fighting media. Do not allow run-off from fire-fighting to enter drains or water courses. Remove product from



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areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.

Hazchem Code •3Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions

Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. When dealing with a spillage do not eat, drink or smoke. Keep unauthorized people away.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

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

Use only in area provided with appropriate exhaust ventilation.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated gloves, including the inside, before re-use. Keep working clothes separately. Garments that cannot be cleaned must be destroyed (burnt). Remove soiled clothing immediately and clean thoroughly before using again.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Keep out of the reach of children. Store in original container. Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage

Keep away from food, drink and animal feedingstuffs



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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

| Components | CAS-No. | Control parameters Update | | Basis |
|-----------------------------|-------------|---------------------------|---------|----------|
| Imidacloprid | 138261-41-3 | 0.7 mg/m3 (TWA) | | OES BCS* |
| Beta-cyfluthrin | 68359-37-5 | 0.01 mg/m3 (TWAEV) | | OES BCS* |
| Glycerine (Inhalable mist.) | 56-81-5 | 10 mg/m3 (TWA) | 12 2011 | AU NOEL |

^{*}OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

8.2 Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

Respiratory protection is not required under anticipated circumstances of exposure. 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
Protective index Class 6

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 4 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.

If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

General protective measures

If product is handled while not enclosed, and if contact may occur: Complete suit protecting against chemicals.



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Engineering Controls

Advice on safe handling

Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form Suspension

Colour Light beige to light brown 4.5 - 7.0 at 100 % (23 °C) pΗ

Flammability (solid, gas) The product is not highly flammable.

ca. 1.08 g/cm3 at 20 °C Density

Partition coefficient: n-

octanol/water Imidacloprid: log Pow: 0.57

Beta-cyfluthrin: log Pow: 6.18 at 22 °C

Impact sensitivity Not impact sensitive

Explosivity Not explosive (92/69/EEC, A.14 / OECD 113)

9.2 Other information

Further safety related physical-chemical data are not known

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 No hazardous reactions when stored and handled according to

hazardous reactions prescribed instructions.

10.4 Conditions to avoid Strong acids, Strong bases, Strong oxidizing agents

10.5 Incompatible materials Store only in the original container

10.6 Hazardous Thermal decomposition can lead to release of: Hydrogen chloride decomposition products

(HCI) Hydrogen cyanide (hydrocyanic acid) Hydrogen fluoride

Carbon monoxide Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 1044 mg/kg

Test conducted with a similar formulation.

Acute inhalation toxicity LC50 (Rat) > 2.03 mg/l

Exposure time: 4 h



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Highest attainable concentration.

Determined in the form of liquid aerosol. Test conducted with a similar formulation.

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

Test conducted with a similar formulation.

Skin irritation Slight irritation (Rabbit)

The value mentioned relates to the active ingredient beta-cyfluthrin.

No skin irritation (Rabbit)

The value mentioned relates to the active ingredient imidacloprid.

Eye irritation Mild eye irritation. (Rabbit)

The value mentioned relates to the active ingredient beta-cyfluthrin.

No eye irritation (Rabbit)

The value mentioned relates to the active ingredient imidacloprid.

Sensitisation Non-sensitizing. (Guinea pig)

OECD Test Guideline 406, Magnusson & Kligman test

The value mentioned relates to the active ingredient beta-cyfluthrin.

Non-sensitizing. (Guinea pig)

OECD Test Guideline 406, Magnusson & Kligman test

The value mentioned relates to the active ingredient imidacloprid.

Assessment mutagenicity

Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

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

Assessment carcinogenicity

Imidacloprid was not carcinogenic in lifetime feeding studies in rats and mice. Cyfluthrin was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Imidacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Imidacloprid is related to parental toxicity.

Cyfluthrin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Cyfluthrin is related to parental toxicity.

Assessment developmental toxicity

Imidacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity.

Cyfluthrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Cyfluthrin are related to maternal toxicity.

Assessment STOT Specific target organ toxicity - repeated exposure

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

The toxic effects of Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Aspiration hazard

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

Information on likely routes of exposure

Toxic by inhalation.

May cause skin irritation.



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May cause eye irritation.

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

No further toxicological information is available.

HSNO classifications

6.1D (All), 6.1D (I), 6.1D (O), 6.3B, 6.5B, 6.8C, 6.9B (All), 6.9B (I), 6.9B (O)

Harmful if swallowed or inhaled.

Causes mild skin irritation.

May cause an allergic skin reaction.

Contact with facial skin may cause temporary facial numbness.

May cause harm to breastfed children.

May cause damage to organs through prolonged or repeated exposure.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)) 211 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient imidacloprid.

LC50 (Oncorhynchus mykiss (rainbow trout)) 0.068 μg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient beta-cyfluthrin.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 85 mg/L

Exposure time: 48 h

The value mentioned relates to the active ingredient imidacloprid.

EC50 (Daphnia magna (Water flea)) 0.29 µg/L

Exposure time: 48 h

The value mentioned relates to the active ingredient beta-cyfluthrin.

EC50 (Chironomus riparius (non-biting midge)) 0.0552 mg/l

Exposure time: 24 h

The value mentioned relates to the active ingredient imidacloprid.



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Chronic toxicity to aquatic invertebrates

EC10 (Chironomus riparius (non-biting midge)): 2.09 μg/l

Exposure time: 28 d

The value mentioned relates to the active ingredient imidacloprid.

Toxicity to aquatic plants

IC50 (Desmodesmus subspicatus (green algae)) > 10 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient imidacloprid.

IC50 (Desmodesmus subspicatus (green algae)) > 0.01 mg/l

Exposure time: 72 h

The value mentioned relates to the active ingredient beta-cyfluthrin.

No acute toxicity was observed at its limit of water solubility.

Toxicity to other organisms

LD50 (Coturnix japonica (Japanese quail)) > 2,000 mg/kg

The value mentioned relates to the active ingredient beta-cyfluthrin.

12.2 Persistence and degradability

Biodegradability

Imidacloprid: Not rapidly biodegradable Beta-Cyfluthrin: Not rapidly biodegradable

Koc Imidacloprid: Koc: 225, Beta-Cyfluthrin: Koc: 508 - 3179

12.3 Bioaccumulative potential

Bioaccumulation

Imidacloprid: Does not bioaccumulate.

Beta-Cyfluthrin: Bioconcentration factor (BCF) 506 Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil

Imidacloprid: Moderately mobile in soils

Beta-Cyfluthrin: Immobile in soil

12.5 Other adverse effects

Additional ecological information

No other effects to be mentioned.

HSNO classifications

9.1A (All), 9.1A (M), 9.2B, 9.3B, 9.4A

Very toxic to aquatic life with long lasting effects.

Toxic to the soil environment.

Toxic to terrestrial vertebrates.

Very toxic to terrestrial invertebrates.

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



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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 3082
Class 9
Subsidiary Risk None
Packaging group III

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (IMIDACLOPRID, BETA-CYFLUTHRIN 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 3082
Class 9
Subsidiary Risk None
Packaging group III

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (IMIDACLOPRID, BETA-CYFLUTHRIN MIXTURE)

IATA

UN-Number 3082
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Environmental Hazard mark YES

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (IMIDACLOPRID, BETA-CYFLUTHRIN MIXTURE)

SECTION 15. REGULATORY INFORMATION

EPA approval number APPROVED PURSUANT TO THE HSNO ACT 1996, No.

HSR100720

See www.epa.govt.nz for approval controls.

MPI Approved maintenance compound Insecticide Type B (All animal products except dairy)

www.foodsafety.govt.nz

AsureQuality assessed product H3121

www.assessedproducts.asurequality.com

See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information Temprid® is a registered trademark of Bayer.

This SDS summarises our best knowledge of the health and safety hazard information of the product

Bayer Safety Data Sheet

Temprid® 75 Residual Insecticide



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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.

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

EU 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) Inhibition concentration to x %

IMDG International Maritime Dangerous Goods

LCx Lethal concentration to x %

LDx Lethal dose to x %

ICx

LOEC/LOEL Lowest observed effect concentration/level

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 Internal Bayer CropScience "Occupational Exposure Standard"

PEAK Exposure Standard - Peak means a maximum or peak airborne concentration of a particular

substance determined over the shortest analytically practicable period of 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 notation: Absorption through the skin may be a significant source of exposure. 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 Time Weighted Average

UN United Nations

WHO World Health Organisation

END OF SDS