SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: Temprid® 75 Residual Insecticide
Other names: None
Product code (UVP): 79726996
Recommended use: Insecticide
Chemical formulation: Suspension concentrate (=flowable concentrate)(SC)
Company: Bayer CropScience Pty. Ltd.
ABN 87 000 226 022
391-393 Tooronga Road, East Hawthorn
Victoria 3123, Australia
Telephone: (03) 9248 6888
Technical Information Service: 1800 804 479
Facsimile: (03) 9248 6800
Website: www.bayeres.com.au
Contact: (03) 9248 6888 Technical Manager
Emergency telephone no.: 1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>HAZARDOUS SUBSTANCE</th>
<th>DANGEROUS GOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-phrase(s): R23/25 - Toxic by inhalation and if swallowed. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
<td></td>
</tr>
<tr>
<td>S-phrase(s): See sections 4, 5, 6, 7, 8, 10, 13.</td>
<td></td>
</tr>
<tr>
<td>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, Temprid Residual Insecticide is a MARINE POLLUTANT. See Section 14.</td>
<td></td>
</tr>
<tr>
<td>SUSMP classification (Poison Schedule): Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons).</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Beta-Cyfluthrin 25 g/L
Imidacloprid 50 g/L

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta-cyfluthrin</td>
<td>68359-37-5</td>
<td>2.5</td>
</tr>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>5.0</td>
</tr>
<tr>
<td>Glycerine</td>
<td>56-81-5</td>
<td>11.5</td>
</tr>
</tbody>
</table>
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.

Inhalation
Move to fresh air. When symptoms persist or in all cases of doubt seek medical advice.

Skin contact
Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

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. Get medical attention if irritation develops and persists.

Ingestion
Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth.

Notes to physician

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.

Treatment
Treat symptomatically.
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.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media
Water spray
Carbon dioxide (CO₂)
Foam
Dry chemical

Hazards from combustion products
In the event of fire dangerous gases may evolve.

Precautions for fire-fighting
In the event of fire, wear self-contained breathing apparatus.
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 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

#### Personal 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.

#### 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.

#### 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, labeled and closed containers for disposal.

#### Additional advice
- Information regarding personal protective equipment, see section 8.
- Information regarding waste disposal, see section 13.

### SECTION 7. HANDLING AND STORAGE

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

#### Storage
- **Requirements for storage areas and containers:**
  - Keep out of research 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.

**Suitable materials:**
- HDPE (high density polyethylene)
SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>0.7 mg/m³ (TWA)</td>
<td></td>
<td>OES BCS</td>
</tr>
<tr>
<td>Glycerine (Inspirable dust)</td>
<td>56-81-5</td>
<td>10 mg/m³ (TWA)</td>
<td>12 2011</td>
<td>AU OEL</td>
</tr>
<tr>
<td>Glycerine (Inspirable dust)</td>
<td>56-81-5</td>
<td>Sk (Notices)</td>
<td>12 2011</td>
<td>AU OEL</td>
</tr>
</tbody>
</table>

For further details on the Occupational Exposure Standards, see Section 16.

Personal protective equipment - End user
Respiratory protection: No personal respiratory protective equipment normally required.
Hand protection: Elbow-length PVC or nitrile gloves.
Skin and body protection: Cotton overall buttoned to the neck and wrist.

Engineering controls
Advice on safe handling: Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: Liquid, suspension
Colour: White to beige
Odour: Characteristic

Safety data
pH: 4.5 – 7.0 at 100 %
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: 1.08 g/cm³ at 20 °C
Water solubility: Miscible
Partition coefficient: n-octanol/water: No data available
SECTION 10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Materials to avoid: Strong acids
Bases
Strong oxidizing agents

Hazardous decomposition products: Thermal decomposition can lead to release of:
Hydrogen chloride (HCl)
Hydrogen cyanide (hydrocyanic acid)
Hydrogen fluoride
Carbon monoxide
Nitrogen oxides (NOx)

Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential health effects
Inhalation: Toxic by inhalation.

Skin: May cause skin irritation.

Eye: May cause eye irritation.

Ingestion: Toxic if swallowed.

Animal toxicity studies
Acute oral toxicity: LD$_{50}$ (rat) > 1,044mg/kg
Test conducted with similar formulation.

Acute inhalation toxicity: LC$_{50}$ (rat) > 2.03 mg/L
Exposure time: 4 h
Determined in the form of a liquid aerosol.
Highest attainable concentration.
Test conducted with similar formulation.

Acute dermal toxicity: LD$_{50}$ (rat) > 2,000 mg/kg
Test conducted with similar formulation.

Skin irritation: Slight skin irritation (rabbit).
The value mentioned relates to the active ingredient beta-cyfluthrin.

Skin irritation: 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.

Eye irritation: 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 ingredients beta-cyfluthrin.

Sensitisation: 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 general toxicity.

**Assessment developmental toxicity**
Imidacloprid caused developmental toxicity only at doses 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.

**Chronic toxicity**
Imidacloprid did not cause any significant specific adverse effects or target organ toxicity in subchronic toxicity studies.
Cyfluthrin caused clinical signs of toxicity including neurological symptoms and effects on the thyroid in chronic studies on rats and dogs.

**Assessment neurotoxicity**
Imidacloprid showed slight behavioral and activity changes only at the highest dose tested in neurotoxicity studies in rats. There were no correlating morphological changes observed in the neural tissues.

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### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects**

**Toxicity to fish:**

- **LC₅₀ (Oncorhynchus mykiss (Rainbow trout))** 0.068 µg/L
  - Exposure time: 96 h
  - The value mentioned relates to the active ingredient beta-cyfluthrin.

- **LC₅₀ (Oncorhynchus mykiss (Rainbow trout))** 211 mg/L
  - Exposure time: 96 h
  - The value mentioned relates to the active ingredient imidacloprid.
Toxicity to aquatic invertebrates:
EC₅₀ (Daphnia magna (Water flea)) 0.29 µg/L
Exposure time: 48 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.

Toxicity to aquatic invertebrates:
LC₅₀ (Chironomus riparius (non-biting midge)) 0.0552 mg/L
Exposure time: 24 h
The value mentioned relates to the active ingredient imidacloprid.

Toxicity to aquatic plants:
IC₅₀ (Desmodesmus subspicatus) > 0.01 mg/L
Growth rate 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 aquatic plants:
EC₅₀ (Desmodesmus subspicatus) > 10 mg/L
Growth rate Exposure time: 72 h
The value mentioned relates to the active ingredient imidacloprid.

Toxicity to other organisms:
LD₅₀ (Coturnix japonica (Japanese quail)) > 2,000 mg/kg
The value mentioned relates to the active ingredient beta-cyfluthrin.

Biodegradability: Readily biodegradable.
The value mentioned relates to the active ingredient beta-cyfluthrin.

Stability in soil: No data available.

Bioaccumulation: No data available.

Additional environmental information: No data available.

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: 3082
Class: 9
Subsidiary Risk: None
Packaging group: III
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
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
- **EmS**: F-A, S-F
- **Marine pollutant**: YES
- **Description of the goods**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-CYFLUTHRIN, IMIDACLOPRID SOLUTION)

**IATA**

- **UN-Number**: 3082
- **Class**: 9
- **Subsidiary Risk**: None
- **Packaging group**: III
- **Environm. Hazardous Mark**: YES
- **Description of the goods**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-CYFLUTHRIN, IMIDACLOPRID SOLUTION)

**SECTION 15. REGULATORY INFORMATION**

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

Australian Pesticides and Veterinary Medicines Authority approval number: 64371.

See also Section 2.

**SECTION 16. OTHER INFORMATION**

**Trademark information**

Temprid® is registered trademark of the Bayer Group.

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.
Further details on the Occupational Exposure Standards mentioned in Section 8
CEILING: Ceiling Limit Value
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.
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.
SK: Skin notation: Absorption through the skin may be a significant source of exposure.
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.

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

END OF SDS