SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name Lebaycid® Insecticide Spray
Other names none
Product code (UVP) 04845676
Chemical Group Organophosphorus
Recommended use Insecticide
Chemical Formulation Emulsifiable concentrate (EC)
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.bayercropscience.com.au
Emergency telephone no. 1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

HAZARDOUS SUBSTANCE DANGEROUS GOODS

Hazardous classification Hazardous (National Occupational Health and Safety Commission - NOHSC)
R-phrase(s) R20/22 - Harmful by inhalation and if swallowed.
R48/25 - Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R68 - Possible risk of irreversible effects.
S-phrase(s) See sections 4, 5, 6, 7, 8, 10, 12, 13.
ADG Classification "Dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. - See Section 14.
SUSMP classification (Poison Schedule) Schedule 6 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Fenthion 550g/l

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fenthion</td>
<td>55-38-9</td>
<td>49.10</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>&gt;= 15.00 - &lt;= 20.00</td>
</tr>
<tr>
<td>Nonylphenol ethoxylate 8 EO</td>
<td>37205-87-1</td>
<td>&gt;= 15.00 - &lt;= 20.00</td>
</tr>
<tr>
<td>Other ingredients (non-hazardous) to 100%</td>
<td></td>
<td></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
When inhaled remove to fresh air and seek medical aid. Keep patient warm and at rest. Oxygen or artificial respiration if needed.

Skin contact
Take off contaminated clothing and shoes immediately. Wash off thoroughly with plenty of soap and water, if available with polyethylene glycol 400, subsequently rinse with water. 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. Call a physician or poison control center immediately.

Ingestion
Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately. Keep patient warm and at rest. Do not induce vomiting or give anything by mouth to an unconscious person.

Notes to physician

Symptoms
Headache, Blurred vision, Weakness, Sweating, Nausea, Vomiting, Cyanosis, Muscle twitching, Spasm, Miosis, Respiratory paralysis, Aspiration may cause pulmonary oedema and pneumonitis.

Risks
This product is a cholinesterase inhibiting organophosphorous pesticide.

Treatment
The following antidotes are generally accepted: atropin and oximes. Before antidote is administered, either clear symptoms of poisoning have to be present or the cholinesterase activity is inhibited to below 30% of normal. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. In case of aspiration intubation and bronchial lavage should be considered. Contraindication: derivatives of adrenaline. Monitor: respiratory, cardiac, kidney, liver and central nervous system.

SECTION 5. FIRE FIGHTING MEASURES

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

Hazards from combustion products
In the event of fire the following may be released:
Carbon monoxide (CO)
Oxides of phosphorus
Sulphur dioxide (SO2)

Precautions for fire-fighting
Wear self-contained breathing apparatus and protective suit.
Avoid contact with spilled product or contaminated surfaces.
Evacuate personnel to safe areas.
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.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code •3W

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.
Use personal protective equipment.
Keep unauthorized people away.
Remove all sources of ignition.

Environmental precautions
Contain contaminated water and fire fighting 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.

Methods for cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Collect and transfer the product into a properly labelled and tightly closed container.
Clean contaminated floors and objects thoroughly, observing environmental regulations.
Keep unauthorized people away.

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

Handling
Hygiene measures
Avoid contact with skin, eyes and clothing.
When using, do not eat, drink or smoke.
Wash thoroughly with soap and water after handling.
Remove soiled clothing immediately and clean thoroughly before using again.
Before removing gloves clean them with soap and water.
Wash hands immediately after work, if necessary take a shower.

Advice on protection against fire and explosion
Keep away from heat and sources of ignition.

Storage
Requirements for storage areas and containers
Keep out of the reach of children.
Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep away from direct sunlight.
Storage temperature should not exceed 30 °C.

Flammability 3/6 Flammable Substances, toxic
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>Fenthion</td>
<td>55-38-9</td>
<td>0.05 mg/m³ (TWA)</td>
<td></td>
<td>OES BCS</td>
</tr>
<tr>
<td>Fenthion</td>
<td>55-38-9</td>
<td>0.2 mg/m³ (TWA)</td>
<td>08 2005</td>
<td>AU OEL</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>100 ppm (TWA)</td>
<td></td>
<td>OES BCS</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>655 mg/m³ / 150 ppm (STEL)</td>
<td>08 2005</td>
<td>AU OEL</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>350 mg/m³ / 80 ppm (TWA)</td>
<td>08 2005</td>
<td>AU OEL</td>
</tr>
</tbody>
</table>

Fenthion 55-38-9 Skin designation: Can be absorbed through the skin.

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

Biological limit values
Monitoring workers for blood cholinesterase levels is recommended.
A baseline level should be established prior to any potential exposure. See Guidelines for Health Surveillance [NOHSC:7039(1995)].

Personal protective equipment - End user

Respiratory protection AS/NZS 1715/1716 approved respirator
Hand protection Elbow-length PVC or nitrile gloves
Eye protection Face-shield or goggles
Skin and body protection Cotton overall buttoned to the neck and wrist
Washable hat
Impervious footwear
During post harvest dipping operation wear a full-length waterproof apron.

Engineering Controls
Advice on safe handling
Provide for appropriate exhaust ventilation and dust collection at machinery.
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, clear
Colour brown
Odour aromatic

Safety data
pH 4.9 - 5.9 at 10 % (23 °C)
Flash point                   > 38 °C
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. 1.11 g/cm³ at 20 °C
Water solubility          emulsifiable
Partition coefficient: n-octanol/water  no data available

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability                   Stable under normal conditions.
Conditions to avoid                  Heat, flames and sparks.
Materials to avoid                    Strong oxidizing agents
                                      Iron
                                      Bases
Hazardous Decomposition             Thermal decomposition can lead to release of:
                                      Carbon monoxide
                                      Oxides of phosphorus
                                      Sulphur oxides
Hazardous reactions                 No dangerous reaction known under conditions of normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects
Inhalation                Very toxic by inhalation. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Inhalation of high vapour concentrations can cause CNS-depression and narcosis.
Skin                      Toxic by skin absorption May cause skin irritation.
Eye                       May cause slight irritation.
Ingestion                 Toxic if swallowed.
Acute oral toxicity       LD50 (rat) 309 - 474 mg/kg
Acute inhalation toxicity  LC50 (rat) > 1.102 mg/l
Exposure time: 4 h
Determined in the form of a respirable aerosol.

Acute dermal toxicity  LD50 (rat) > 4,000 mg/kg

Skin irritation  Slight irritation (rabbit)

Eye irritation  Slight irritation (rabbit)

Sensitisation  Non-sensitizing. (guinea pig)
The value mentioned relates to the active ingredient.

Chronic toxicity  Fenthion did not cause specific target organ toxicity in experimental animal studies.
Xylene did not cause specific target organ toxicity in experimental animal studies.

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

Assessment Carcinogenicity
Fenthion was not carcinogenic in lifetime feeding studies in rats and mice.
Xylene was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction
Fenthion 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 Fenthion is related to parental toxicity.
Xylene did not cause reproductive toxicity in a two-generation study in rats.

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish  LC50 (Oncorhynchus mykiss (rainbow trout))  0.83 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient fenthion.

Toxicity to fish  LC50 (Oncorhynchus mykiss (rainbow trout))  13.5 mg/l
Exposure time: 96 h
The value mentioned relates to the solvent xylene.
Toxicity to aquatic invertebrates
EC50 (Water flea (Daphnia magna)) 0.0057 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient fenthion.

Toxicity to aquatic invertebrates
EC50 (Water flea (Daphnia magna)) 3.82 mg/l
Exposure time: 48 h
The value mentioned relates to the solvent xylene.

Toxicity to aquatic plants
EC50 (Scenedesmus subspicatus) 1.79 mg/l
The value mentioned relates to the active ingredient fenthion.

Toxicity to aquatic plants
EC50 (Algae) 1 - 10 mg/l
The value mentioned relates to the solvent xylene.

Toxicity to other organisms
LD50 (Apis mellifera (bees)) 0.16 μg/bee
The value mentioned relates to the active ingredient fenthion.
Toxic to bees.

Toxicity to other organisms
LC50 (Eisenia fetida (earthworms)) 375 mg/kg
The value mentioned relates to the active ingredient fenthion.

Toxicity to other organisms
LD50 (Colinus virginianus (Bobwhite quail)) 7.2 mg/kg
The value mentioned relates to the active ingredient fenthion.

Biodegradability
Readily biodegradable.
The value mentioned relates to the solvent xylene.

Biodegradability
Readily biodegradable.
aerobic
The value mentioned relates to the active ingredient fenthion.

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 3017
Class 6.1
SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 32996
See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information

Lebaycid® is a 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" Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

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.

SKIN_DES: 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.