1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name: Baythroid® Turf Insecticide
Other names: None
Product code: 67949
Recommended use: An insecticide for the control of insect pests in turf, ornamentals, cut flowers and native flowers.
Supplier: Bayer Environmental Science – A Business Group of Bayer CropScience Pty Ltd ABN 87 000 226 022
Address: 391 - 393 Tooronga Road, East Hawthorn Victoria 3123, Australia
Telephone: (03) 9248 6888
Facsimile: (03) 9248 6800
Website: www.bayercropscience.com.au
Contact: Technical Manager (03) 9248 6888
Emergency Telephone Number: 1800 033 111 – Orica SH&E Shared Services

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE - DANGEROUS GOOD
Will irritate eyes and skin. Flammable.

Hazard designation: Hazardous according to criteria of Worksafe Australia.
Risk phrases: R25 Toxic if swallowed.
R20/21 Harmful by inhalation and in contact with skin.
R23 Toxic by inhalation.
R36 Irritating to eyes.
R38 Irritating to skin.
Safety phrases: Not applicable
ADG classification: Class 6.1
SUSDP classification: Schedule 6 (Standard for the Uniform Scheduling of Drugs and Poisons)

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS Number</th>
<th>Concentration (g/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyfluthrin</td>
<td>[68359-37-5]</td>
<td>50</td>
</tr>
<tr>
<td>Xylene</td>
<td>[1330-20-7]</td>
<td>754</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>-</td>
<td>95</td>
</tr>
</tbody>
</table>
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 a doctor.

**Inhalation:** Remove patient to fresh air. Keep rested and warm.

**Skin contact:** If skin contact occurs, remove contaminated clothing and wash skin thoroughly with soap and water. Remove from contaminated area. Apply artificial respiration if not breathing.

**Eye contact:** If in eyes hold eyes open, flood with water for at least 15 minutes and seek medical advice.

**Ingestion:** If swallowed DO NOT induce vomiting. Give a glass of water to drink. Never give anything by mouth to an unconscious person. Seek medical assistance.

**First Aid Facilities:** Ensure washing facilities, including eye-wash, are available.

**Symptoms:** No specific symptoms of poisoning expected.

**Medical attention:** Treat symptoms. No specific antidote known. Apply basic aid and de-contamination procedures.

5. FIRE FIGHTING MEASURES

**Extinguishing media:** Water fog (if unavailable a fine water spray may be used)

**Hazards from combustion products:** In the event of a fire the formation of hydrogen chloride, hydrogen fluoride and oxides of nitrogen must be anticipated.

**Precautions for fire fighters:** Fire fighters should wear full protective clothing and self-contained breathing apparatus (AS1716:2000). Do not release contaminated water into the environment.
6. ACCIDENTAL RELEASE MEASURES

Alert and evacuate all personnel from the immediate area. Prevent spill from spreading or entering waterways or drains. Take up with absorbent material such as binding agent for chemicals. Fill material along with any contaminated soil etc. into sealable containers. Clean affected area with an aqueous detergent and a small amount of water. On completion of clean up remove and wash all protective clothing and equipment with detergent and water. Any heavily contaminated clothing should be placed in a plastic garbage bag and placed in a sealable drum. Do not smoke eat or drink during clean up operation.

7. HANDLING AND STORAGE

Handling: Keep out of reach of children.

Storage: Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Do not store near any material intended for consumption by humans or animals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards: Worksafe Australia exposure standards have not been established for the active ingredient Xylene  TWA  350 mg/cubic metre

Engineering controls: Control process conditions to avoid contact.

Personal Protective Equipment: Eyes: Avoid contact with eyes; wear face-shield or goggles.
Clothing: Avoid contact with skin. Wear cotton overalls buttoned to the neck and wrist and a washable hat.
Gloves: Wear elbow-length PVC gloves.
Respiratory: Avoid inhaling spray mist.
Other: Do not eat, drink or smoke until after washing. Wash thoroughly after handling. After each day’s use wash gloves, face-shield or goggles and contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear brown emulsifiable liquid.
Odour: A pungent odour.
Vapour pressure: Not available
Vapour density: Not available
Boiling point: Not available
Freezing/melting point: Not available
Solubility: Insoluble, emulsifiable
Density: 0.9 at 20 °C
pH: 7.5
Flash Point: > 26 °C (closed cup)
Flammability (explosive) limits: Flammable
Auto-ignition temperature: Not available
Octanol/water partition coefficient: Not available
Formulation: Emulsifiable concentrated liquid

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions of use.
Hazardous polymerisation: Hazardous polymerisation will not occur.
Conditions to avoid: Keep concentrate away from open flame and ignition sources.
Incompatible materials: Avoid oxidising agents.
Hazardous decomposition products: If involved in a fire: hydrogen chloride gas, hydrogen fluoride, oxides of nitrogen may be emitted.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation: Toxic by inhalation.
Skin contact: Harmful in contact with skin. Will irritate the skin
Eye contact: Will irritate the eyes.
Ingestion: Poisonous if swallowed. No specific symptoms of poisoning expected.
Other: None
ANIMAL TOXICITY DATA – PRODUCT:

Acute:

Oral toxicity: LD$_{50}$ rat: 1213-1410 mg/kg (formulated product) i.e. harmful

Dermal toxicity: LD$_{50}$ rat: >5000 mg/kg (formulated product) i.e. practically non-toxic

Inhalation toxicity: LC$_{50}$ (4 h) rat: 702 mg/cu m (formulated product) i.e. practically non-toxic

Skin irritation: Not available

Eye irritation: Highly irritating – rabbit

Sensitisation: Not available

Chronic:

Animal studies with the active ingredient have shown no evidence of carcinogenic effects or teratogenic potential.

12. ECOLOGICAL INFORMATION

Dangerous to fish.
Cover fish tanks before use. DO NOT contaminate ponds, waterways or drains with the chemical or used container.

Dangerous to bees and other beneficial insects.
DO NOT spray any plants in flower whiles bees are foraging.
Do not graze or feed treated grass clippings to livestock.

Fish toxicity: Dangerous to fish

Daphnia toxicity: Not available

Toxicity to algae: Not available

Bird toxicity: Not available

Bee toxicity: Dangerous to bees

Other: None

Environmental fate, persistence and degradation: Not available
13. DISPOSAL CONSIDERATIONS

Follow Avicare guidelines. 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 the purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

UN number: 2903
Proper shipping name: PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. (cyfluthrin);
Class and Subsidiary Risk: 6.1 Subsidiary Risk 3
Packing Group: III
Hazchem code: 3W

15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988
National Registration Authority Approval Number: 39211

16. OTHER INFORMATION

Trademark information: Baythroid® is a Registered Trademark of Bayer.
Reason for update: Conversion to 16 heading format.
Data sources: Bayer CropScience Pty Ltd product safety data and published data

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.

END OF MSDS