

MATERIAL SAFETY DATA SHEET



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MSDS No. FMC/FSC120/2

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name: FURY 120 SC GENERAL HOUSHOLD
INSECTICIDE**

Other Names: Bifenthrin + Alpha-cypermethrin.
Use: General pest insecticide for use in industrial, commercial and domestic areas.
Company: FMC Australasia Pty Ltd.
Address: PO Box 528, North Ryde BC NSW 1670
Telephone Number: 02 9887 0900 **Fax Number:** 02 9887 0911
Emergency Telephone Number: 1800 033 111 (All hours - Australia wide).

SECTION 2 HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.
Classified as a Dangerous Good according to the ADG Code.**

GHS Classification:
Acute Toxicity – Oral: Category 3.

Signal Word: DANGER.

Hazard Statements:
H301 Toxic if swallowed.

Precautionary statements:
Prevention

P264 Wash hands, arms and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P321 Specific treatment (see Safety Directions on the product label).

Storage and Disposal

P405 Store locked up.
P501 Dispose of contents/container in accordance with national regulations.

Pictogram:



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	CAS NUMBER	PROPORTION
Bifenthrin	82657-04-3	80 g/L
Alpha-cypermethrin	67375-30-8	40 g/L
Propylene glycol	57-55-6	1-10%
Other ingredients determined not to be hazardous	mixture	Balance

SECTION 4 FIRST AID MEASURES

FIRST AID

- Swallowed:** If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If swallowed, do not induce vomiting. Give a glass of water.
- Eye:** If in eyes, hold eyes open and flush with water until chemical is removed. If irritation occurs and persists, obtain medical attention.
- Skin:** If on skin immediately wash with plenty of soap and water. Remove contaminated clothing. If irritation occurs and persists see a doctor. Launder contaminated clothing before re-use.
- Inhaled:** Remove patient to fresh air. If breathing discomfort occurs, obtain medical attention.

Advice to Doctors: This product has a moderate to high acute oral toxicity and low dermal and inhalation toxicity. It is not irritating to the eyes and skin, and non-sensitizing to the skin. Treatment is controlled removal of exposure followed by symptomatic and supportive care.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Considered low risk due to water content, however upon evaporation of water the product is combustible. Low risk of explosion if involved in a fire.

Extinguishing media: Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff. Preferred extinguishing media: alcohol resistant foam, CO₂ or dry chemical. Soft stream water fog if no alternatives. DO NOT use water jet. Contain all runoff.

Hazards from combustion products: Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

SECTION 6 ACCIDENTIAL RELEASE MEASURES

Emergency procedures: Isolate and post spill area. Keep out unprotected persons and animals. Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), and elbow length chemical resistant gloves. Large spills should be dyked or covered to prevent dispersal. Vacuum shovel or pump spilled material into an approved container and dispose of as listed in section 13.

In the case of spillage, stop leak if safe to do so, and contain spill. Absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons.

Material and methods for containment and cleanup procedures: To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: Ensure containers are kept closed until using product. Poisonous if swallowed. Avoid contact with skin. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), and elbow length chemical resistant gloves. In addition, if applying by low pressure hand wand, wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat, chemical resistant gloves and a half face piece respirator with organic vapour/gas cartridge or canister. Wash hands after use. After each day's use, wash gloves, respirator and if rubber wash with detergent and warm water, and contaminated clothing.

SECTION 7 HANDLING AND STORAGE (Continued)

Conditions for Safe Storage: This product should be stored as a Dangerous Good of Class 6. DO NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in closed original containers, in a cool, well ventilated area away from children, animals, food and feedstuffs. Do not store for prolonged periods in direct sunlight. This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:

Exposure guidelines have not been established for this product by Safe Work Australia, however an ingredient (propylene glycol) in this product has the following exposure guideline.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m ³)
Propylene glycol (Vapour and Particulates)	474 mg/m ³ (150 ppm)	-
TWA = Time-weight Average		
STEL = Short term Exposure Limit		

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Use in well ventilated area only. Ventilate all transport vehicles prior to unloading. Keep containers closed when not in use.

Personal Protective equipment (PPE):

General: When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), and elbow length chemical resistant gloves. In addition, if applying by low pressure hand wand, wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat, chemical resistant gloves and a half face piece respirator with organic vapour/gas cartridge or canister. Wash hands after use. After each day's use, wash gloves, respirator and if rubber wash with detergent and warm water, and contaminated clothing.

Personal Hygiene: Poisonous if swallowed. Avoid contact with skin. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off white liquid suspension.
Odour:	Mild odour.
Boiling point:	Not available.
Freezing point:	Not available.
Specific Gravity:	1.0 g/mL.
pH:	4 - 6.
Solubility in Water:	Product emulsifies in water.
Flammability:	Not flammable.
Flashpoint (°C):	Not flammable.
Flammability Limits (%):	Not established.
Poisons Schedule:	Product is a schedule 6 (S6) poison.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight.

Incompatible materials: Can react with strong oxidising agents and acids.

Hazardous decomposition products: Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes.

Hazardous reactions: Will not polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

Potential Health Effects:

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

Acute

Swallowed: This product is toxic if swallowed; the acute oral LD₅₀ (rat) > 50 - < 300 mg/kg.

Eye: Not irritating to the eyes.

Skin: This product has a low dermal toxicity. The dermal LD₅₀ in the rabbit is > 2000 mg/kg. It is non irritating and non-sensitising to the skin.

Inhaled: Low inhalation toxicity. Acute inhalation LC₅₀ > 1.02 mg/L/4 hrs (Similar product), which was the highest attainable concentration.

Chronic: No data is available for the formulation. In studies with laboratory animals, bifenthrin and alpha-cypermethrin did not cause reproductive toxicity, teratogenicity, or carcinogenicity. An overall absence of genotoxicity has been demonstrated in tests of mutagenicity, DNA damage and chromosome aberrations.

SECTION 12 ECOLOGICAL INFORMATION

Environmental toxicity data are based on the active constituents, bifenthrin and alpha-cypermethrin. The physical and environmental properties as well as the environmental toxicology of Alpha-cypermethrin are similar to cypermethrin. Unless indicated the information below pertains to cypermethrin.

Environmental Toxicology: Bifenthrin, is highly toxic to fish and aquatic arthropods with LC₅₀ values ranging from 0.0038 µg/L to 17.8 µg/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on molluscs at its limit of water solubility. Bifenthrin is only slightly toxic to both waterfowl and upland game birds with LC₅₀ values range from 1800 mg/kg to > 2,150 mg/kg. Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

Cypermethrin is rapidly degraded in soil with a half-life of 2 to 4 weeks. It is readily hydrolysed under basic conditions (pH=9), but under acid or neutral conditions, hydrolysis half-life can be 20 to 29 days. Cypermethrin has a high affinity for organic matter and a Log P_{ow} of 5.0; yet because of the ease with which the material undergoes degradation, it has a very low potential for bioaccumulation and is not mobile in soil.

Environmental Properties: Bifenthrin, degrades at a moderate rate in agricultural soils (t_{1/2} = 50 to 205 days), and more rapidly on the surface of bare soils (t_{1/2} = 7 to 62 days). Bifenthrin is tightly bound in most soils and has extremely low water solubility.

Alpha-cypermethrin is considered highly toxic to fish and aquatic arthropods and has LC₅₀ values which range from 0.93 µg/L to 2.8 µg/L. Care should be taken to avoid contamination of the aquatic environment. Cypermethrin is slightly toxic to birds and oral LD₅₀ values are greater than 10,248 mg/kg. Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills & Disposal: In the case of spillage, contain and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated below or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons. Keep material out of streams and sewers.

SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

Vacuum, shovel or pump waste into an approved drum. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities.

Dangerous to Fish: Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

Disposal of empty, non-returnable 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 containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. 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 container below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Empty containers and product should not be burnt. Do not re-use empty containers.

SECTION 14 TRANSPORT INFORMATION

Transport: This product is classified as a Dangerous Good. UN 3352 PYRETHROID PESTICIDE, LIQUID, TOXIC. Class 6.1, Hazchem 2X. Packaging Group III. Hazard Identification Number (HIN) 66.

SECTION 15 REGULATORY INFORMATION

Classified as a hazardous substance according to criteria of Safe Work Australia. (T). Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a schedule 6 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 69934.

Product is classified as a Dangerous Good according to the ADG Code (7th Ed) and the International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16 OTHER INFORMATION

Issue Date: March 2021 (Included APVMA registration).

Key to abbreviations and acronyms used in this MSDS:

- ADG Code:** Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
- Ataxia:** Inability to control the coordinate movements of the muscles.
- Bradycardia:** Is a resting heart rate of under 60 beats per minute (adults).
- Carcinogen:** An agent which is responsible for the formation of a cancer.
- Clonic:** An abnormality in neuromuscular activity characterized by rapidly alternating muscular contraction and relaxation.
- Genotoxic:** Capable of causing damage to genetic material, such as DNA.
- Haematopoietic:** Pertaining to the formation of blood or blood cells.
- Lavage:** The irrigation or washing out of an organ, as of the stomach or bowel.
- Mutagen:** An agent capable of producing a mutation.
- Oedema:** Accumulation of fluid in tissues.
- NOHSC:** National Occupational Health and Safety Commission.
- Teratogen:** An agent capable of causing abnormalities in a developing foetus.

SECTION 16 OTHER INFORMATION (Continued)

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. "Search Hazardous Substances". Safe Work Australia website. (2015).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

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.

End MSDS