



**SAFETY DATA SHEET**  
**TROJAN INSECTICIDE**

**SDS # :** FO004304-A  
**Revision date:** 2020-10-14  
**Format:** AP  
**Version** 1.1

**Section 1: PRODUCT AND COMPANY IDENTIFICATION**

**Product Name** TROJAN INSECTICIDE  
**Product Code(s)** FO004304-A  
**Active Ingredient(s)** Gamma-cyhalothrin  
**Recommended Use:** Insecticide.  
**Restrictions on use** Use as recommended by the label.  
**Manufacturer** FMC Australasia Pty Ltd  
Building B' Level 2, 12 Julius Avenue,  
NORTH RYDE, NSW 2113  
Australia  
  
Telephone: 1800 066 355 (Customer service 1800 901 939)  
Telefax: 1800 355 896  
  
**Emergency telephone** 1800 033 111 (Transport Emergency)  
1800 033 111 (24 hr Emergency Medical Information)

**Section 2: HAZARDS IDENTIFICATION**

**GHS Classification**

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitisation	Category 1B
Specific target organ toxicity — repeated exposure	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

**Label Elements**



**Signal Word**

**Danger**

**Hazard Statements**

H332 - Harmful if inhaled  
H317 - May cause an allergic skin reaction  
H372 - Causes damage to organs through prolonged or repeated exposure  
H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
 P271 - Use only outdoors or in a well-ventilated area  
 P272 - Contaminated work clothing should not be allowed out of the workplace  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P264 - Wash hands thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 P312 - Call a POISON CENTER or doctor if you feel unwell  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention  
 P321 - Specific treatment (see supplemental first aid instructions on this label)  
 P363 - Wash contaminated clothing before reuse  
 P314 - Get medical advice/ attention if you feel unwell

**Precautionary Statements - Disposal**

P501 - Dispose of contents/container according to label directions

**Other Information**

None known

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight percent
Gamma-cyhalothrin	76703-62-3	15.3
Naphtha (petroleum), heavy aromatic	64742-94-5	5-15

### Section 4: FIRST AID MEASURES

<b>Inhalation</b>	Move to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
<b>Eye Contact</b>	Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
<b>Ingestion</b>	Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice.
<b>Most important symptoms and effects, both acute and delayed</b>	Gamma-cyhalothrin can cause feelings of burning, tingling or numbness in exposed areas (paraesthesia).
<b>Protection of first-aiders</b>	Use personal protective equipment. See Section 8 for more detail.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	As soon as a feeling of tingling is noted in any skin area (see section 11), it is recommended to immediately apply lidocaine or a vitamin E cream. For this purpose lidocaine or vitamin E cream should be available at the workplace.  Notes to physician: A specific antidote for exposure to this material is not known. Gastric lavage and/or the administration of activated charcoal can be considered. After decontamination, treatment should be directed at the control of symptoms and the clinical condition.

### Section 5: FIREFIGHTING MEASURES

**Explosive properties** Not explosive.

<b>Suitable Extinguishing Media</b>	Water spray, dry chemical, carbon dioxide (CO <sub>2</sub> ), or foam. Avoid heavy hose streams.
<b>Unsuitable extinguishing media</b>	No information available
<b>Specific Hazards Arising from the Chemical</b>	The essential breakdown products are volatile, toxic, irritant and inflammable compounds such as hydrogen fluoride, nitrogen oxides, carbon monoxide, carbon dioxide and various fluorinated organic compounds. Traces of hydrogen cyanide may be present.
<b>Protective equipment and precautions for firefighters</b> <b>HAZCHEM Emergency Action Code</b>	Isolate fire area. Evaluate upwind. Dike to prevent runoff As in any fire, wear self-contained breathing apparatus and full protective gear 3Z

## Section 6: ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	<p>It is recommended to have a predetermined plan for the handling of spills. Empty, closable vessels for the collection of spills should be available.</p> <p>In case of large spill (involving 10 tonnes of the product or more):</p> <p>Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and rubber boots. Stop the source of the spill immediately if safe to do so. Keep unprotected persons away from the spill area.</p>
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.
<b>Methods for Containment</b>	<p>It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping. Use non-sparking tools and equipment. If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should immediately be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with detergent and much water. Absorb wash liquid onto inert absorbent such as universal binder, Fuller's earth, bentonite or other absorbent clay and collect in suitable containers. The used containers should be properly closed and labelled.</p>
<b>Methods for cleaning up</b>	<p>If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with damp cloth and/or strong industrial detergent with much water. Absorb wash liquid onto a suitable absorbent such as universal binder, attapulgate, bentonite or other absorbent clays and transfer contaminated absorbent to suitable containers. The used containers should be properly closed and labelled.</p> <p>spills which soak into the ground should be dug up and transferred to suitable containers. in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.</p>

## Section 7: HANDLING AND STORAGE

<b>Handling</b>	In an industrial environment it is recommended to avoid all personal contact with the product, if possible by using closed systems with remote system control. Otherwise it is recommended to handle the material by mechanical means as much as possible. Adequate ventilation or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8. Remove contaminated clothing and shoes. Wash thoroughly after handling. Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with
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soap and water before reuse. Check regularly for leaks. Do not discharge to the environment. Do not contaminate water when disposing of equipment wash waters. Collect all waste material and remains from cleaning equipment, etc., and dispose of as hazardous waste. See section 13 for disposal.

**Storage** The product is stable under normal conditions of warehouse storage. Protect against extremes of heat and cold. Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

**Materials to avoid** Strong oxidising agents, Strong acids, Strong bases.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

To our knowledge, no exposure limits have been established for gamma-cyhalothrin. An internal value of 0.02 mg/m<sup>3</sup> (8-hr LTEL-TWA) is recommended by the manufacturer.

However, other personal exposure limits defined by local regulations may exist and must be observed.

**Engineering measures** Apply technical measures to comply with the occupational exposure limits (if listed above). When working in confined spaces (tanks, containers, etc.), make sure there is an adequate source of air for breathing and wear the recommended equipment. Ventilate all transport vehicles prior to discharge.

### Personal protective equipment

**Respiratory Protection** The product does not automatically present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment with a universal filter type including particle filter.

**Hand Protection** Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.

**Eye/Face Protection** When opening the container and preparing spray, wear goggles and a disposable fume face mask covering mouth and nose.

**Skin and Body Protection** When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, goggles and a disposable fume face mask covering mouth and nose. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>Appearance</b>	Off white liquid
<b>Odour</b>	Aromatic
<b>Colour</b>	Off-white
<b>Odour threshold</b>	No information available
<b>pH</b>	4.5-5.0 (undiluted)
<b>Melting point/freezing point</b>	No information available
<b>Boiling point/boiling range</b>	No information available
<b>Flash point</b>	> 100 °C
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	Not applicable
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available

Lower flammability limit	No information available
Vapour pressure	Gamma-cyhalothrin : $1.03 \times 10^{-7}$ Pa at 20°C $3.45 \times 10^{-7}$ Pa at 25°C
Vapour density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility(ies)	No information available
Partition coefficient	LOG Kow= 5.2 @ 25° C
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	Not explosive
Oxidising properties	Non-oxidizing
Density	No information available
Bulk density	No information available

## Section 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	To our knowledge, the product has no special reactivities.
<b>Stability</b>	Gamma-cyhalothrin: Decomposes on heating. Direct local heating such as electric heating or by steam must be avoided.
<b>Hazardous reactions</b>	None known.
<b>Hazardous polymerisation</b>	Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	Heating can release hazardous gases.
<b>Incompatible products</b>	Strong oxidising agents, Strong acids, Strong bases.
<b>Hazardous Decomposition Products</b>	See Section 5 for more information.

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

**Product Information** The product has not been tested. The following data is based on a similar formulation.

### Numerical measures of toxicity - Product Information

<b>LD50 Oral</b>	2250 mg/kg (male rat) (Method: OECD 401) 2646 mg/kg (female rat)
<b>LD50 Dermal</b>	> 5000 mg/kg (rat) OECD 402
<b>Inhalation LC50</b>	> 2.72 mg/l 4 hr (male rat) 2.54 mg/L 4 hr (female rat) (Method OECD 403)

<b>Skin corrosion/irritation</b>	Slightly irritating (rabbit). (Method: OECD 404).
<b>Serious eye damage/eye irritation</b>	Mildly to moderately irritating to eyes. (Method: OECD 405).
<b>Sensitisation</b>	Skin sensitiser. (Method: OECD 406).

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Mutagenicity</b>	The product contains no ingredients known to be mutagenic.
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product
<b>Reproductive toxicity</b>	This product does not contain any known or suspected reproductive hazards.
<b>STOT - single exposure</b>	No specific effects after single exposure have been observed.
<b>STOT - repeated exposure</b>	Gamma-cyhalothrin. Target organ: nervous system. Repeated exposure may cause neurotoxic effects. Changes of behavior were seen in animal tests at exposure levels of 6 - 8 mg/kg bw/day (method OECD 408).

**Symptoms** 1 On contact, gamma-cyhalothrin may cause feelings of burning, tingling or numbness in exposed areas (paraesthesia), which is harmless but can be quite painful, especially in the eye. The effect may result from splash, aerosol or transfer from contaminated gloves. It is enhanced by sweating, water and sunshine. This effect is transient, usually lasting up to 24 hours, but may in exceptional cases last longer. It may be considered as a warning that overexposure has occurred and that work practice should be reviewed.

**Aspiration hazard** The product does not present an aspiration pneumonia hazard.

**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity**

The ecotoxicity of the formulation is based on a similar product:

- Fish Rainbow trout (*Oncorhynchus mykiss* Walbaum) 96-h LC50: 9.19 µg/l
- Invertebrates Daphnids (*Daphnia magna* Straus) .....48-h LC50: 2.45 µg/l
- Algae Green algae (*Selenastrum capricornutum* Printz) 72-h IC50: 317 mg/l
- Earthworms *Eisenia foetida foetida* .....14-day LC50: > 1000 mg/kg dry soil
- Birds Bobwhite quail (*Colinus virginianus*) .....LD50: > 2000 mg/kg
- Insects Bees (*Apis mellifera*) .....48-h LD50, contact: 0.03 µg/bee  
 48-h LD50, oral: 1.26 µg/bee.

**Persistence and degradability** Gamma-cyhalothrin: Not readily biodegradable. The product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

**Bioaccumulation** See section 9 for n-octanol/water partition coefficient.  
 Gamma-cyhalothrin: The substance has a potential for bioconcentration.

**Mobility** Gamma-cyhalothrin: Not mobile in soil.

**Other Adverse Effects** None known.

**Section 13: DISPOSAL CONSIDERATIONS**

**Waste disposal methods** Remaining quantities of the material and empty but unclean packaging should be regarded as hazardous waste. Dispose of as hazardous waste in compliance with local and national regulations. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

**Contaminated Packaging** Triple or preferably pressure rinse containers before disposal. Add rinsings to the 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 deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface 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. DO NOT burn empty containers or product.

**Section 14: TRANSPORT INFORMATION**

**IMDG/IMO**  
**UN/ID no** 3082

**TROJAN INSECTICIDE**

**SDS # :** FO004304-A  
**Format:** AP  
**Revision date:** 2020-10-14  
 Version 1.1

**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s (microencapsulated gamma-cyhalothrin)  
**Hazard class** 9  
**Packing Group** III  
**Special Provisions** Do not discharge to the environment.  
**Marine Pollutant** Yes

**ICAO/IATA**

**UN/ID no** 3082  
**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s (microencapsulated gamma-cyhalothrin)  
**Hazard class** 9  
**Packing Group** III  
**Special Provisions** Do not discharge to the environment.  
**Marine Pollutant** Yes

**ADG**

Trojan is a non-dangerous good in Australia based on Special Provision AU01 in the Australia Dangerous good code.  
 Not dangerous goods under ADG code when being transported in IBCs or other receptacles < 500 kg (Special Provision AU01).

**Special Transport Requirements**

Matters needing attention for transportation:

Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 L or less for liquids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provisions A97, A158 and A197.

**Section 15: REGULATORY INFORMATION**

SUSMP: S5  
 APVMA product number: 56175.

**International Inventories**

A food, food additive, drug, cosmetic, or device, when manufactured, processed or distributed in commerce for use as a food, food additive, drug, cosmetic, or device may not be subject to local notification requirements. Check local regulations for more information.

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Gamma-cyhalothrin 76703-62-3			X					
Naphtha (petroleum), heavy aromatic 64742-94-5	X	X	X		X	X	X	X

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

**Section 16: OTHER INFORMATION**

Prepared By FMC Corporation

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Revision date: 2020-10-14

Revision note Release 1.1

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**End of Safety Data Sheet**