

# Safety Data Sheet

according to WHS Regulations

Printing date 20.02.2020

Revision: 20.02.2020

## 1 Identification

**Product Name:** GENFARM CHLORPYRIFOS 500 INSECTICIDE**Other Means of Identification:** Mixture**Recommended Use of the Chemical and Restriction on Use:** Agricultural insecticide**Details of Manufacturer or Importer:**

Nutrien Ag Solutions Limited  
 Level 5, Building A  
 26 Talavera Road  
 Macquarie Park NSW 2113

**Phone Number:** 02 9889 5400**Emergency telephone number:** National Poison Information Centre: 13 11 26

## 2 Hazard(s) Identification

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



skull and crossbones

Acute Toxicity (Oral) 3 H301 Toxic if swallowed.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Flammable Liquids 4 H227 Combustible liquid.

**Signal Word** Danger**Hazard Statements**

H227 Combustible liquid.

H301 Toxic if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P210 Keep away from flames and hot surfaces. No smoking.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P330 Rinse mouth.

P370+P378 In case of fire: Use to extinguish: CO2, powder or water spray.

P391 Collect spillage.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

(Contd. on page 2)

# Safety Data Sheet

## according to WHS Regulations

Printing date 20.02.2020

Revision: 20.02.2020

**Product Name: GENFARM CHLORPYRIFOS 500 INSECTICIDE**

(Contd. of page 1)

P501 Dispose of contents/container in accordance with local/regional/national regulations.

### 3 Composition and Information on Ingredients

**Chemical Characterization: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 2921-88-2	Chlorpyrifos (ISO)	50%
	☠ Acute Toxicity (Oral) 3, H301; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	

**Additional information:**

Liquid Hydrocarbon (A), CAS No. not supplied: 474 g/L

Liquid Hydrocarbon (B), CAS No. not supplied: 488 g/L

### 4 First Aid Measures

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

**Ingestion:**

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

**Symptoms Caused by Exposure:**

Inhalation: May cause symptoms similar to ingestion.

Skin Contact: May cause symptoms similar to ingestion.

Eye Contact: May cause eye irritation, stinging, reddening and watering.

Ingestion: Toxic if swallowed. May cause numbness, tingling sensations, incoordination, headache, dizziness, nausea, abdominal cramps, excessive sweating and salivation, blurred vision, respiratory depression, unconsciousness, incontinence, convulsions, fatigue, slowed heart rate, seizures and possible fatality.

### 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use fire extinguishing methods suitable to surrounding conditions.**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon, nitrogen, sulphur and phosphorous, nitrogen compounds, hydrogen cyanide, sulphur compounds, phosphorous compounds, hydrogen chloride, other chlorine compounds, smoke and water.

Product is combustible.

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

(Contd. on page 3)

# Safety Data Sheet

## according to WHS Regulations

Printing date 20.02.2020

Revision: 20.02.2020

**Product Name: GENFARM CHLORPYRIFOS 500 INSECTICIDE**

(Contd. of page 2)

### 6 Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. If absorbent material is not available or spill is too large, create a dike to stop spill from spreading. Collect the spilled material and place into a suitable container for disposal.

### 7 Handling and Storage

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep in original container tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents, strong acids and strong bases.

### 8 Exposure Controls and Personal Protection

**Exposure Standards:**
**CAS: 2921-88-2 Chlorpyrifos (ISO)**

WES	TWA: 0.2 mg/m <sup>3</sup> Sk
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**Engineering Controls:** Ensure adequate ventilation of the working area.

**Respiratory Protection:**

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**

PVC or rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

(Contd. on page 4)

# Safety Data Sheet

according to WHS Regulations

Printing date 20.02.2020

Revision: 20.02.2020

**Product Name: GENFARM CHLORPYRIFOS 500 INSECTICIDE**

(Contd. of page 3)

## 9 Physical and Chemical Properties

**Appearance:****Form:**

Liquid

**Colour:**

Straw coloured

**Odour:**

Characteristic hydrocarbon

**Odour Threshold:**

No information available

**pH-Value:**

No information available

**Melting point/freezing point:**

No information available

**Initial Boiling Point/Boiling Range:**

No information available

**Flash Point:**

&gt;63 °C

**Flammability:**

Combustible

**Auto-ignition Temperature:**

No information available

**Decomposition Temperature:**

No information available

**Explosion Limits:****Lower:**

No information available

**Upper:**

No information available

**Vapour Pressure:**

No information available

**Relative Density at 20 °C:**

1.05-1.10 (expected)

**Vapour Density:**

No information available

**Evaporation Rate:**

No information available

**Solubility in Water:**

Emulsifies into water.

**Partition Coefficient (n-octanol/water):** No information available**Viscosity:**

No information available

## 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.**Conditions to Avoid:** Heat, sparks, open flames, hot surfaces and direct sunlight.**Incompatible Materials:** Strong oxidising agents, strong acids and strong bases.**Hazardous Decomposition Products:**

Oxides of carbon, nitrogen, sulphur and phosphorous, nitrogen compounds, hydrogen cyanide, sulphur compounds, phosphorous compounds, hydrogen chloride, other chlorine compounds, smoke and water.

## 11 Toxicological Information

**Toxicity:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:****CAS: 2921-88-2 Chlorpyrifos (ISO)**

Oral	LD <sub>50</sub>	1000 mg/kg (rabbit)
		500-504 mg/kg (guinea pig)
		60 mg/kg (mice)
Dermal	LD <sub>50</sub>	1000-2000 mg/kg (rabbit)
		>2000 mg/kg (rat)
Inhalation	LC <sub>50</sub> /4 h	>0.2 mg/L (rat)

**Acute Health Effects****Inhalation:** May cause symptoms similar to ingestion.**Skin:** May cause symptoms similar to ingestion.

(Contd. on page 5)

## Safety Data Sheet

according to WHS Regulations

Printing date 20.02.2020

Revision: 20.02.2020

**Product Name: GENFARM CHLORPYRIFOS 500 INSECTICIDE**

(Contd. of page 4)

**Eye:** May cause eye irritation, stinging, reddening and watering.**Ingestion:**

Toxic if swallowed. May cause numbness, tingling sensations, incoordination, headache, dizziness, nausea, abdominal cramps, excessive sweating and salivation, blurred vision, respiratory depression, unconsciousness, incontinence, convulsions, fatigue, slowed heart rate, seizures and possible fatality.

**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:**

Repeated or prolonged exposure to organophosphates may result in the same effects as acute exposure including the delayed symptoms. Other effects reported in workers repeatedly exposed include impaired memory and concentration, disorientation, severe depressions, irritability, confusion, headache, speech difficulties, delayed reaction times, nightmares, sleepwalking, and drowsiness or insomnia.

**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for chlorpyrifos for a human is 0.003 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.03 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2020).

Chlorpyrifos primarily affects the nervous system through inhibition of cholinesterase, an enzyme required for proper nerve functioning. Chlorpyrifos is readily absorbed into the bloodstream through the gastrointestinal tract if it is ingested, through the lungs if it is inhaled, or through the skin if there is dermal exposure. In humans, chlorpyrifos and its principal metabolites are eliminated rapidly.

## 12 Ecological Information

**Ecotoxicity:** Serious hazard to wildlife and bees.**Aquatic toxicity:** Very Toxic to aquatic life with long lasting effects.**Persistence and Degradability:**

Persistent in soils. Half-life in soil normally ranges from 60 to 120 days, though may be as long as a year, depending on soil type.

**Bioaccumulative Potential:** No information available**Mobility in Soil:**

Due to relatively low solubility and strong potential to adsorb to soil, chlorpyrifos is immobile in soils.

**Other adverse effects:** No information available

(Contd. on page 6)

# Safety Data Sheet

according to WHS Regulations

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Revision: 20.02.2020

**Product Name: GENFARM CHLORPYRIFOS 500 INSECTICIDE**

(Contd. of page 5)

## 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

## 14 Transport Information

<b>UN Number</b>	UN3018
<b>ADG, IMDG, IATA</b>	
<b>Proper Shipping Name</b>	ORGANOPHOSPHEROUS PESTICIDES, LIQUID TOXIC, (chlorpyrifos (ISO))
<b>ADG, IATA</b>	ORGANOPHOSPHEROUS PESTICIDES, LIQUID TOXIC, (chlorpyrifos (ISO)), MARINE POLLUTANT
<b>IMDG</b>	
<b>Dangerous Goods Class</b>	
<b>ADG Class:</b>	6.1 Toxic substances.
<b>Packing Group:</b>	
<b>ADG, IMDG, IATA</b>	III
<b>Marine pollutant:</b>	Yes Symbol (fish and tree)
<b>EMS Number:</b>	F-A,S-A
<b>Hazchem Code:</b>	2X
<b>Special Provisions:</b>	61, 223, 274
<b>Limited Quantities:</b>	5L
<b>Packagings &amp; IBCs - Packing Instruction:</b>	P001, IBC03, LP01
<b>Portable Tanks &amp; Bulk Containers - Instructions:</b>	T7
<b>Portable Tanks &amp; Bulk Containers - Special Provisions:</b>	TP2, TP28

## 15 Regulatory Information

**Australian Inventory of Chemical Substances:**

CAS: 2921-88-2 Chlorpyrifos (ISO)

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**

Poisons Schedule: 6

## 16 Other Information

**Date of Preparation or Last Revision:** 20.02.2020

**Prepared by:** MSDS.COM.AU Pty Ltd

[www.msds.com.au](http://www.msds.com.au)

**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC<sub>50</sub>: Lethal concentration, 50 percent

(Contd. on page 7)

## Safety Data Sheet

according to WHS Regulations

Printing date 20.02.2020

Revision: 20.02.2020

**Product Name: GENFARM CHLORPYRIFOS 500 INSECTICIDE**

(Contd. of page 6)

LD<sub>50</sub>: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable Liquids 4: Flammable liquids – Category 4

Acute Toxicity (Oral) 3: Acute toxicity – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016”

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