

## SAFETY DATA SHEET

### COMMEND®

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

##### 1.1 Identifiers

Product name: **COMMEND®**  
Other Name(s): Suspension concentrate containing 480g/litre thiacloprid

##### 1.2 Recommended use of the chemical and restrictions on use

Product Use: Horticultural insecticide for control of certain pests in apples, avocados and kiwifruit.

##### 1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited  
Address: 20 Jean Batten Drive Mt Maunganui, 3116  
Telephone: 0800 220 002  
Email: [info@grosafe.co.nz](mailto:info@grosafe.co.nz)

**Emergency telephone number** 0800 CHEMCALL (0800 243 622)

#### SECTION 2: HAZARD IDENTIFICATION

##### 2.1 Classification of the Hazardous Chemical

Hazardous substance according to Hazardous Substances and New Organisms (HSNO) Act 1996  
HSNO Substance Approval: HSR000715

**Hazard Classifications:** Acute oral toxicity Category 4; Reproductive toxicity Category 2; Carcinogenicity Category 2, Specific target organ toxicity – repeated exposure Category 2; Hazardous to the aquatic environment acute Category 1; Hazardous to the aquatic environment chronic Category 1; Hazardous to soil organisms; Hazardous to terrestrial vertebrates; Hazardous to terrestrial invertebrates.

##### 2.2 Label elements:

**Pictograms:**



**Signal Word: WARNING**

**Hazard statements:**

H302 Harmful if swallowed.  
H351 Suspected of causing cancer  
H361 Suspected of damaging fertility or the unborn child.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
Hazardous to soil organisms  
Hazardous to terrestrial vertebrates

Hazardous to terrestrial invertebrate

**Precautionary statements:**

*Prevention*

P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe mist/spray/vapours.
P264	Wash hands and exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves, clothing, eye/face protection

*Response*

P301 + P312	IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
P308 + P313	If exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.

*Storage*

P405	Store locked up.
------	------------------

*Disposal*

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

**Additional labelling statements required under Hazardous Substances (Labelling) Notice 2017**

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Do not apply directly into or onto water.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Proportion % w/w
Thiacloprid	38641-94-0	~40
Other ingredients*	Trade secret	balance

This is a commercial product whose exact ratio of components may vary slightly.

\*Do not affect the hazardous classifications of the product.

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

**General Information:**

If you feel unwell, or are exposed or concerned, call the National Poisons Centre, telephone 0800 POISON [0800 764 766], or a doctor. Have product label or container at hand.

**IF SWALLOWED:** Call a POISON CENTRE or doctor if you feel unwell.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical advice/attention if irritation persists.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if irritation persists.

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

**4.2 Symptoms caused by exposure**

Unlikely to cause harmful effects under normal conditions of handling and use.

**4.3 Medical attention and special treatment**

Treat symptomatically.

## SECTION 5: FIRE FIGHTING MEASURES

**5.1 Suitable extinguishing media**

Use water spray or fog or foam as appropriate for surrounding materials. Contain extinguishing media to prevent runoff into drains, sewers, waterways.

**5.2 Specific hazards arising from the chemical**

Fire decomposition products may be toxic/harmful and/or irritating if inhaled.

Evacuate people to safe area upwind of fire.

**5.3 Special protective equipment and precautions for fire fighters**

Wear full personal protective equipment including with self-contained breathing apparatus (SCBA).

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

Have this SDS available. In the event of a spill, wear appropriate protective clothing, eye and skin protection. Wash contaminated personal protective equipment and clothing, and dry before re-use.

**6.2 Environmental precautions**

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

**6.3 Methods and materials for containment and cleaning up**

Contain spilled material. For small liquid spills, use inert absorbent material, such as sand or vermiculite, and recover into labelled drums that can be sealed for safe disposal. For large liquid spills, recover liquid into labelled containers then absorb remaining liquid and transfer to drums for disposal. Clean area with water and detergent.

Dispose of contaminated materials to approved landfill in accordance with local regulations.

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling**

Read the label before use.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe mist/spray/vapours.

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

Wear protective gloves, clothing, eye/face protection

Wash hands and exposed skin thoroughly after handling.

Do not apply directly into or onto water.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Avoid contact with skin and eyes. Avoid inhalation of spray mist/aerosols. Wear protective equipment such as coat/trouser (overalls), boots, gloves and eye protection. Do not use spray equipment

contaminated with this product for any other purpose unless first thoroughly cleaned with a suitable cleaning detergent.

### 7.2 Conditions for safe storage

Store locked up in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area and out of direct sunlight. Keep away from food, drink and animal feedstuffs. Storage of 100L or more of this product requires an emergency response plan, secondary containment and signage.

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 8.1 Control parameters – exposure standards, biological monitoring

Ingredient	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
-	-	-

No biological limits applicable.

### 8.2 Engineering controls

Use in well-ventilated area or outdoors.

### 8.3 Personal protective equipment (PPE)

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

**Eye/Face Protection:** Wear chemical splash goggles if eye contact is possible.

**Skin Protection:** Wear impervious chemical resistant gloves (e.g. nitrile, butyl), coveralls, socks and chemical resistant footwear. For overhead spray exposure, wear chemical resistant headgear. Ensure all skin areas are covered.

**Respirator:** Use outdoors in well-ventilated area or use local exhaust ventilation. Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a cartridge, suitable for particulates.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White / beige liquid
Odour	Negligible
Odour threshold	No data available
pH	ca 7.0
Melting/Freezing Point	No data available
Boiling Point /Range	ca 100 °C
Flash point	Non flammable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	No data available
Vapour Pressure	Thiacloprid 3 x 10 <sup>-7</sup> mPa @ 20°C
Vapour density	No data available
Specific gravity	1.15 – 1.2 g/cm <sup>3</sup>
Solubility	Forms a suspension in water

Partition Co-efficient n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Particle characteristics	No data available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

This product is unlikely to react or decompose under normal storage conditions.

### 10.2 Chemical stability

Stable under normal temperatures and pressure for storage and use.

### 10.3 Conditions to Avoid

Avoid extreme heat / freezing.

### 10.4 Incompatible materials and possible hazardous reactions

Incompatible with explosives, oxidising agents, organic peroxides. Hazardous decomposition products formed at high temperatures.

### 10.5 Hazardous decomposition products

**Fire Decomposition:** Carbon dioxide, carbon monoxide, smoke and other unspecified compounds.

### 10.6 Polymerisation

Not known to occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Health hazard information

The product is classified for health hazards according to an assessment of information on product.

### 11.2 Toxicological information

Acute toxicity:	Harmful if swallowed.
Aspiration hazard:	Product is not classified as aspiration hazard.
Respiratory irritation:	Product is not classified as irritant.
Skin corrosion/irritation	Product is not classified as irritant.
Serious eye damage/irritation	Product is not classified as irritant.
Respiratory or skin sensitisation	Product is not classified as sensitizer.
Germ cell mutagenicity:	No ingredients in product identified as presumed or suspected mutagens.
Carcinogenicity	Suspected of causing cancer. In animal studies with thiacloprid active ingredient there was limited evidence of a carcinogenic potential. These effects occurred in animals only at high doses and are not considered predictive of similar effects in humans.
Reproductive toxicity	Suspected of damaging fertility or the unborn child. In animal studies with thiacloprid active ingredient there was limited evidence of a possible risk of harm to the unborn child. These effects occurred in animals only at high doses and are not considered predictive of similar effects in humans. Thiacloprid was not mutagenic, and was not neurotoxic in animal studies.
Specific target organ toxicity – single/repeated exposure	May cause damage to organs (liver, thyroid) following prolonged or repeated exposure.



Narcotic effects

Product contains no ingredient identified as causing narcotic effects.

### 11.3 Toxicological data:

Product

Not available

Methoxyfenoxide

Oral, LD50 rat: 300 - 500 mg/kg (similar product)

Dermal, LD50 rat: 4000 mg/kg (similar product)

Inhalation, LC50 (4 h) rat: 0.9 - 2.2 mg/L (as an aerosol) (similar product)

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

This product is classified as being harmful to aquatic life with long lasting effects, hazardous to soil organisms, hazardous to terrestrial vertebrates, and hazardous to terrestrial invertebrates.

### 12.2 Environmental Fate

**Breakdown in soil and groundwater:** Non-persistent. DT50 (6 soils) 7-21 days.

**Bioaccumulation:** Thiachloprid has a low potential for bioconcentration or bioaccumulation.

**Partition coefficient (octanol/water):** Log P 1.26

**Soil mobility:** Low to medium mobility in soils.

### 12.3 Ecotoxicity data:

Thiachloprid

*Fish toxicity:*

LC50: 30.5 mg/L (96 h); rainbow trout (*Oncorhynchus mykiss*)

LC50: 25.2 mg/L (96 h); bluegill sunfish (*Lepomis macrochirus*)

*Aquatic invertebrate toxicity:*

EC50: 24.5 µg/L (96 h); amphipod (*Hyaella azteca*)

EC50: 2.18 µg/L (28 day) midge (*Chironomus riparius*)

EC50: 85.1 mg/L (48 h) *Daphnia magna*

*Algae toxicity:*

LC50: 96.7 mg/L (72 h); green algae (*Desmodesmus subspicatus*)

*Bird toxicity:*

Acute oral LD50: 49 mg/kg; Japanese quail

Acute oral LD50: 2716 mg/kg; bobwhite quail

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Product Disposal

Refer to product label. If possible, dispose of by using according to the label. Otherwise dispose of to Agrecovery® chemical recovery service or at an approved landfill in accordance with local regulations.

### 13.2 Container Disposal

Refer to product label. Do not use packaging for storage of any other products. Triple rinse empty container and add rinsate to spray tank. Submit container to Agrecovery® for recycling, or crush and send to approved landfill.

## SECTION 14: TRANSPORT INFORMATION

### Road and Rail Transport:

Classified as Dangerous Good Class 9 according to NZS5433 Transport of Dangerous Goods on Land

### Marine Transport (IMO/IMDG):

Classified as Dangerous Good Class 9 by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

### Air Transport (ICAO/IATA):

Classified as Dangerous Good Class 69 by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

**UN Number:** 3082

**UN Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (THIACLOPRID 40%)

**Transport hazard class(es)** 9

**Packing Group:** III

**Special Precautions for User:**

**IMDG Marine pollutant:** Yes

**Transport in Bulk:** Not available

## SECTION 15: REGULATORY INFORMATION

### 15.1 HSNO Act 1996

Hazardous substance according to Hazardous Substances (Hazard Classification) Notice 2020.

**Approved substance number:** HSR000715

**Hazard classifications:** Acute oral toxicity Category 4; Reproductive toxicity Category 2; Carcinogenicity Category Specific target organ toxicity – repeated exposure Category 2; Hazardous to the aquatic environment acute Category 1; Hazardous to the aquatic environment chronic Category 1; Hazardous to soil organisms; Hazardous to terrestrial vertebrates; Hazardous to terrestrial invertebrates.

**Controls:** Refer to control on [www.epa.govt.nz](http://www.epa.govt.nz) for complete wording for variation Controls.

**Additional information:** Refer to HS Notices ([www.epa.govt.nz](http://www.epa.govt.nz)) and HSW HS Regulations ([www.worksafe.govt.nz](http://www.worksafe.govt.nz))

**Certified handler:** Not applicable

**Tracking:** Not applicable

**Qualifications:** A person mixing, loading or applying this product must be suitably qualified or under the supervision of a suitably qualified person. Refer to Schedule 10 of the Hazardous Substances (Hazardous Property Controls) Notice 2017 for details.

**International Agreements:** Not applicable

**Signage trigger quantity (Schedule 3):** 100 L

**Emergency Response Plan trigger quantity (Schedule 5):** 100 L

**Secondary Containment trigger quantity (Schedule 16):** 100 L

**Record Keeping:** If 3 kg or more of the substance is applied within 24 hours, in a place where the substance is likely to enter air or water and leave the application area, a PCBU with management or control of the substance must ensure that a written record is kept of each application of the substance. Refer to section 48 of the Hazardous Substances (Hazardous Property Controls) Notice 2017 (Hazardous Property Controls) Notice 2017

**Environmental exposure limits:** None set

**Tolerable exposure limits:** None set

### 15.2 ACVM Act 1997

**Registration number:** P8684 COMMEND

Refer to [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions.

## SECTION 16: OTHER INFORMATION

### 16.1 Date of preparation or last revision of SDS

<b>SDS issued</b>	16 August 2024
<b>SDS supersedes</b>	29 <sup>th</sup> June 2020
<b>Reason issued</b>	Update to GHS.

### 16.2 ABBREVIATIONS

<b>ADI</b>	Acceptable Daily Intakes
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>CCID</b>	Chemical Classification Identification Database
<b>EPA</b>	Environmental Protection Authority
<b>ErC<sub>50</sub></b>	Half maximal Effective Concentration
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>HSNO</b>	Hazardous Substances and New Organisms
<b>HS</b>	Health and Safety
<b>HSR</b>	Hazardous Substances Register
<b>IARC</b>	International Agency for Research on Cancer
<b>LC<sub>50</sub></b>	Median Lethal Concentration
<b>LD<sub>50</sub></b>	Median Lethal Dose
<b>SDS</b>	Safety Data Sheets
<b>NOAEL</b>	No Observable Adverse Effect Level
<b>NOEL</b>	No Observable Effect Level
<b>NOS</b>	Not otherwise specified
<b>STEL</b>	Short Term Exposure Limit
<b>SWA</b>	Safety Work Australia
<b>TWA</b>	Time-Weighted Average
<b>UN Number</b>	United Nations Number

### 16.3 REFERENCES

EPA CCID and Approved Substance databases



16 August 2024



PPDB- Pesticides Properties DataBase

**16.4 OTHER**

Commend® is a registered trademark of Grosafe Chemicals Ltd

Information contained in this Safety Data Sheet is provided in good faith and is believed to be correct at the date hereof. However, it's expected that individuals receiving the information will exercise independent judgement in determining its appropriateness for a particular purpose. Grosafe Chemicals Ltd makes no representation whatsoever as to the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability whatsoever, whether with respect to negligence or otherwise, and no responsibility as permitted by law for any loss or damage arising from or connection with the supply or use of the information in this Safety Data Sheet.

End of Safety Data Sheet