

# SAFETY DATA SHEET

## THALONIL

Date of Issue: 1<sup>st</sup> July 2018

### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

**Chemical name of active ingredient(s):** chlorothalonil

**Recommended use:** Fungicide

**Supplier:** Agrisource 2000 Limited  
45 Kitchener Road  
Pukekohe  
Phone: 09 237 0422

**Emergency telephone number:** 0800 Poison (0800 764 766) 24 Hours

### 2. HAZARDS IDENTIFICATION

**Hazard Classifications:** 6.1B, 6.3B, 6.5B, 6.7B, 6.9A, 8.3A, 9.1A, 9.2B, 9.3B

**Required identification Details:** **DANGER** – Keep out of Reach of Children  
6.1B: **TOXIC** - May be fatal if swallowed, inhaled or absorbed through the skin.  
6.3B: **WARNING** – May cause mild skin irritation.  
6.5B: **WARNING** – May cause sensitisation from prolonged skin Contact.  
6.7B: **WARNING** – Limited evidence of a carcinogenic effect in animal studies.  
6.9A: **TOXIC** - may cause organ damage from repeated oral exposure at high doses.  
8.3A: **DANGER** – This product is corrosive and may cause eye damage.  
9.1A: **ECOTOXIC** - Toxic to aquatic organisms with long lasting effects.  
9.2B: **ECOTOXIC** – Toxic to the soil environment.  
9.3B: **ECOTOXIC** – Toxic to terrestrial vertebrates.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
chlorothalonil	1897-45-6	72%
other ingredients determined not to be hazardous		to 100

---

## 4. FIRST-AID MEASURES

**Description of necessary first aid measures:** In case of poisoning by any exposure route contact the National Poisons and Hazardous Chemicals Information Centre, PO Box 913, Dunedin. **Phone 0800 764 766, (0800 POISON).**

<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion:</b>	Rinse the mouth, Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
<b>Skin contact:</b>	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Eye contact:</b>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

---

## 5. FIRE-FIGHTING MEASURES

<b>Type of Hazard:</b>	This product is non-flammable, non-explosive and is non-combustible.
<b>Extinguishing media :</b>	Dry chemical extinguisher, foam, carbon dioxide or fine-water spray. DO NOT use direct jet of water.
<b>HAZCHEM Code:</b>	2X
<b>Fire Hazard Properties:</b>	Decomposition products in a fire are toxic and or irritant. Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.
<b>Protection of fire-fighters:</b>	Wear protective clothing and self contained breathing apparatus. Do not breathe smoke or gases.

---

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions:</b>	Avoid contact with skin and eyes. Do not inhale spray. Wear long sleeved shirt, long pants, waterproof gloves and safety goggles or face shield. Do not eat, drink or smoke when using. Wash hands and face before meals and after work.
<b>Environmental precautions:</b>	Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.
<b>Methods for cleaning up:</b>	In the case of spillage, contain spilled material. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum or shovel waste into a drum.

To decontaminate spill area, tools and equipment, wash with water. Dispose of drummed wastes in accordance with the requirements of Local Authorities

---

## 7. HANDLING AND STORAGE

### Handling:

When mixing or applying, avoid breathing dust and contact with skin and eyes. Wear protective clothing, gloves and goggles. Do not eat or drink while using. Wash hands and face before meals and after work. Wash protective clothing after work.

### Storage:

Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs. Keep out of reach of children. Store in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

### Packaging materials:

HDPE Plastic drum.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace Exposure Guidelines

#### Workplace exposure standards: Exposure Standards outside the workplace:

Chlorothalonil - TWA: 0.1 mg/m<sup>3</sup>

Not required.

### Engineering measures

#### Exposure control measures:

Ensure ventilation is adequate, as product is used outdoors generally natural ventilation is adequate.

### Personal Protective Equipment

#### Detail specifications for equipment:

##### Respiratory system:

Where insufficient ventilation, use suitable respiratory protection.

##### Skin and body:

When opening the container, preparing spray and using prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles.

##### Hands:

Elbow-length and chemical resistant gloves.

##### Eyes:

Wear chemical goggles or face shield.

##### General hygiene:

Females of childbearing age should not come into contact with the product.  
Avoid inhaling aerosols and vapours. Avoid contact with eyes and skin. Store work clothes and street clothes separately. Wash hand before breaks and at the end of work. Change contaminated protective clothing. Keep away from food, drinks and tobacco.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Colour:</b>	beige
<b>Odour:</b>	slightly pungent
<b>pH value:</b>	5 - 9
<b>Density:</b>	Approx - 1.33
<b>Boiling point:</b>	> 100° C.
<b>Solubility in water:</b>	dispersible
<b>Flash point:</b>	does not flash
<b>Explosive property:</b>	not explosive

---

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions of use.
<b>Conditions to avoid:</b>	Direct sunlight, extreme heat or Cold.
<b>Materials to avoid:</b>	None known.
<b>Hazardous decomposition Products:</b>	May include carbon dioxide; occasionally carbon monoxide, nitrogen oxide.
<b>Hazardous reactions :</b>	None expected.

---

## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity – Oral :</b>	LD <sub>50</sub> > 10000 mg/kg (rat)
<b>Acute toxicity - Dermal :</b>	LD <sub>50</sub> > 2000 mg/kg (rat)
<b>Acute toxicity – Inhalation</b>	LC <sub>50</sub> 0.52 mg/l air (1 h) - rat 0.10 mg/l air (4 h) - rat
<b>Skin irritation :</b>	None irritating (rabbit)
<b>Eye irritation:</b>	Mildly irritating (rabbit)
<b>Sensitization :</b>	May cause allergic skin reaction
<b>Carcinogenicity:</b>	Limited evidence of carcinogenicity in animal studies
<b>Specific target organ Toxicity – single exposure:</b>	May cause damage to organs.

---

## 12. ECOLOGICAL INFORMATION

### Data for technical active ingredient:

<b>Toxicity to fish:</b>	LC <sub>50</sub> (96 h) 0,012 mg/l rainbow trout
<b>Toxicity to daphnia:</b>	LC <sub>50</sub> (48 h) 0,06 mg/L, daphnia magna
<b>Toxicity to algae:</b>	EC <sub>50</sub> (120 h) 0,12 mg/L, green algae
<b>Toxicity to birds:</b>	LD <sub>50</sub> > 4.640 mg/kg, mallard duck
<b>Toxicity to bees:</b>	LD <sub>50</sub> (oral) > 63 µg/bee

LD<sub>50</sub> (contact) > 101 µg/bee

<b>Toxicity to earthworms:</b>	LC <sub>50</sub> (14 d) > 404 mg/kg
<b>Breakdown in soil and groundwater:</b>	Moderately persistent. The half-life in aerobic soils is between 1–3 months.
<b>Breakdown in water:</b>	About two third of Chlorothalonil will be degraded into two major metabolites (water at pH 9 – within 10 weeks)
<b>Mobility:</b>	The product has a low to slight mobility in soil.

---

### 13. DISPOSAL CONSIDERATIONS

<b>Methods of disposal :</b>	Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409.
<b>Container disposal:</b>	Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection site.

---

### 14. TRANSPORT INFORMATION - International transport regulations (Land, Sea and Air)

<b>UN number:</b>	2902
<b>Class:</b>	6.1
<b>Packing Group:</b>	III
<b>Marine Pollutant:</b>	Yes
<b>Proper shipping name :</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (chlorothalonil 72%)

---

### 15. REGULATORY INFORMATION

<b>ACVM Registered Number:</b>	<b>P8408</b> (See <a href="http://www.foodsafety.govt.nz/acvm">www.foodsafety.govt.nz/acvm</a> for registration Conditions).
<b>HSNO Approval Code:</b>	<b>HSR000670</b> (See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls).
<b>Approved Handler:</b>	This product must be under the personal control of an approved handler or secured.
<b>Tracking:</b>	Location and movement of this product must be recorded at each stage of its lifecycle.

---

### 16. OTHER INFORMATION

#### **Disclaimer EXCLUSION OF LIABILITY: PLEASE READ**

This Safety Data Sheet is based on information available at the time of issue. To the extent permitted by law, users of this information accept that neither the manufacturer, Agrisource 2000 Limited as distributor, nor any other distributor have any liability or responsibility whatsoever for any loss, damage or injury whether in contract or tort, whether direct, indirect or consequential howsoever arising in connection with the supply of these information.