

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT NAME: CLEANER
 OTHER NAME: Suspension Concentrate containing 720g/litre chlorothalonil
 USE: Fungicide
 SUPPLIER NAME: Shandong Weifang Rainbow Chemical Co., Ltd.
 SUPPLIER ADDRESS: 1# Haigang Road, Binhai Economic Development Area, Weifang, Shandong 262737, China
 SUPPLIER PHONE: +86-531-88875222, 88875231
 SUPPLIER FAX: +86-531-88875232, 88875224
 NZ Emergency Tel: National Poisons Centre, 0800 764 766 [0800 POISON]

2. HAZARDS IDENTIFICATION

NEW ZEALAND: Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996

APPROVAL NUMBER: HSR007697

HAZARD CLASSIFICATIONS: Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1.

PICTOGRAMS:



SIGNAL WORD: DANGER

HAZARD STATEMENTS: Fatal if inhaled. May cause an allergic skin reaction. Causes serious eye damage.
 Suspected of causing cancer. Causes damage to organs (kidneys) through prolonged or repeated exposure.
 Very toxic to aquatic life and with long lasting effects. Hazardous to soil organisms and to terrestrial vertebrates.

PREVENTION: Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety instructions have been read and understood.
 Do not breathe mist/vapours/spray. Wear respiratory protection (fitted for cartridge for particulates).
 Wear protective gloves/protective clothing/eye protection/eye or face protection. Wash hands and exposed skin thoroughly after handling.
 Contaminated work clothing should not be allowed out of the workplace.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.

RESPONSE: IF exposed or concerned: Get medical advice.
 Get medical advice if you feel unwell.
 IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice.
 Wash contaminated clothing before re-use.
 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 Immediately call a POISON CENTRE or doctor.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor.
 Collect spillage.

STORAGE: Store in a well-ventilated place. Keep cool. Store locked up.

DISPOSAL: Dispose of unwanted product and used packaging in compliance with local regulations.

TRANSPORT; This product is a Dangerous Good Class 6.1 for Transport.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS No	% w/w
Chlorothalonil	1897-45-6	53 – 55 *
Ethylene glycol	107-21-1	< 5
Other ingredients	Trade secret	balance

* equivalent to 720 g/L chlorothalonil

4. FIRST - AID MEASURES

Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice. Have product label or SDS at hand.

Ingestion	If swallowed do NOT induce vomiting. Rinse mouth with water. Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice.
Inhalation	Remove patient to fresh air. Keep in position comfortable for breathing. Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor immediately for advice. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Skin contact	Remove contaminated clothing and wash affected area thoroughly with plenty of soap and water. DO NOT scrub the skin. If irritation or rash occurs, get medical advice.
Eye contact	If in eyes flush with plenty of water holding eyelids open if necessary. Remove contact lenses if present, after a few minutes, then continue flushing with water. Immediately get medical advice.
Advice to Doctor	No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability	Non-flammable.
Hazardous Combustion Products	If involved in a fire, may evolve toxic/harmful substances, e.g. carbon and nitrogen oxides and other unspecified compounds.
Extinguishing media	Water fog or spray, carbon dioxide or dry chemical as appropriate to surrounding materials.
Protective Equipment	Full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal: Wear personal protective equipment. Exclude non-essential people from the area. Contain spillage. Collect spillage in labeled containers than can be closed, for reuse or disposal. For small liquid spills absorb spillage with sand, sawdust or other inert material, and place in a sealable labelled waste container. Dispose of waste safely in an approved landfill or hazardous waste facility.

Environmental Precautions: Prevent from entering drains, waterways or sewers. If spill does enter waterways immediately contact local authority.

7. HANDLING AND STORAGE

Handling:	Keep out of reach of children. Keep container tightly closed when not in use. Use only according to label. Wear personal protective equipment. Avoid contact with skin and eyes and inhalation of vapours or spray mist. Specific HSNO Controls apply to the use of this product. Restricted for use only in workplaces. Certified handler required. Tracking control applies. Do not apply directly into or onto water. Take all reasonable steps to ensure the product does not cause any significant adverse effects to the environment beyond the application area. Written record of use required if more than 3 kg applied within 24 hours in a place where the product is likely to enter air or water and leave the application area.
Storage:	Location compliance certificate required when more than 250 L on site. Signage, emergency response plan and secondary containment required when more than 100 L on site.

Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilizer and seed.

For guidance refer to current version of NZS 8409 Management of Agrichemicals and Health and Safety at Work (Hazardous Substances) Regulations 2017.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: Worksafe NZ (12th edition, November 2021)

<i>Ingredient</i>	<i>Exposure</i>	<i>Form</i>	<i>Ceiling</i>
Ethylene glycol	Inhalation	Mist, vapour	50 ppm (127 mg/m ³)

Protective Equipment: When opening the container, preparing to measure, load or when applying: wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.

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**.

Engineering Controls: Handle outdoors or in a well-ventilated area. Use local exhaust ventilation, or other engineering controls as appropriate to conditions.

Hygiene Precautions: Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing and equipment daily after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White flowable liquid
Odour:	Odorless
Odour threshold:	No information available.
pH	6.0 -9.0
Melting point/freezing point:	Not available
Initial boiling point/range:	>100 °C
Flashpoint:	Non-flammable
Flammability (solid, gas):	Not applicable
Upper/lower flammability limits:	Not applicable
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Relative density:	c.a 1.35
Solubilities:	Disperses in water.
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	No information available
Decomposition temperature:	Not available
Kinematic viscosity:	Not available
Particle characteristics:	Not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable under normal storage conditions in original container for at least two years.
Conditions to avoid:	Keep out of direct sunlight and protect from frost.
Incompatible substances or materials:	Unstable under highly alkaline conditions.
Hazardous polymerization:	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Classified as being acutely toxic if inhaled.
Aspiration hazard:	No components identified with aspirant hazard.
Respiratory irritation:	Not classified.
Skin corrosion/irritation:	May be mildly irritating to skin.
Serious eye damage/irritation:	Causes serious eye damage.
Respiratory or skin sensitization:	Chlorothalonil identified as contact sensitizer.
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Chlorothalonil is identified as being suspected of causing cancer.
Reproductive toxicity:	Not classified.
Specific organ toxicity:	Chlorothalonil may cause adverse effects the kidney and renal system through prolonger or repeated exposure. Ethylene glycol causes adverse effects to liver and kidneys.
Narcotic effects:	No components identified with narcotic effects.
Toxicological information:	<u>Chlorothalonil (active)</u> Oral, rat LD ₅₀ >5000 mg/kg bw Inhalation, rat LC ₅₀ (4 hr) 0.0925 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Product is classified as being toxic to aquatic life and with long-lasting effects. Also hazardous in the soil environment and to terrestrial vertebrates.
Ecotoxicological information:	<u>Chlorothalonil (active)</u> Rainbow trout LC ₅₀ (96 h) 0.017 g/L <i>Poecilia reticulata</i> LC ₅₀ (96 h) 0.052 mg/L <i>Daphnia magna</i> EC ₅₀ (48 h) 0.054 mg/L Green alga; <i>Navicula pelliculosa</i> EbC ₅₀ (7 d) growth 0.013 mg/L
Persistence and degradability:	DT ₅₀ (field) >30 days
Potential to be bioaccumulative:	BCF is 100. Identified as threshold for concern.
Mobility in soil:	Chlorothalonil has limited solubility in water.
Other adverse effects:	No information available.

13. DISPOSAL CONSIDERATIONS

Product disposal:	Dispose of product only by using according to label or dispose of at an approved landfill.
Container Disposal:	Ensure container is completely empty. Triple rinse with water and use rinsings to spray spray mix. Dispose of empty clean container to recycler for agricultural chemicals, otherwise crush and bury in an approved landfill. Do not use container for any other purpose.

14. TRANSPORT INFORMATION

UN Number:	2902
Proper Shipping Name:	PESTICIDE, TOXIC, LIQUID, N.O.S (CONTAINS CHLOROTHALONIL 72%)
DG Class:	6.1
Packing Group:	III
Marine Pollutant:	Yes
HAZCHEM	2X

Do not carry on a passenger service vehicle.

15. REGULATORY INFORMATION

New Zealand	Registered pursuant to the ACVM Act 1997, No. P8841
	See www.foodsafety.govt.nz for registration conditions
	Approved pursuant to the HSNO Act 1996, Approval Code HSR007697
	See www.epa.govt.nz for Controls and www.worksafe.govt.nz .
Qualifications	Certified Handler.
Tracking:	Yes
Safety Data Sheet:	Any quantity
Restricted to workplace only:	Yes
Quantity that must be secured when unattended:	Any quantity.
Quantity for secondary containment and emergency response plan:	100 L
Quantity for signage:	100 L
Quantity for Location certificate	250 L

16. OTHER INFORMATION

Version: 2.0

Issue Date: 28th October 2021

Reason for Issue: Update SDS format, GHS classification descriptions.

Replaces: Not available

References:

Supplier Safety Data Sheets

NZ EPA Approved hazardous substances databases.

Worksafe NZ Workplace Exposure Standards and Biological Exposure Indices

Abbreviations:

ACVM	Agricultural Chemicals and Veterinary Medicines Group
ADI	Acceptable Daily Intakes
BCF	Bioconcentration factor
CAS Number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSNO	Hazardous Substances and New Organisms
HS	Health and Safety
HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer

LC ₅₀	Median Lethal Concentration
LD ₅₀	Median Lethal Dose (50% population)
SDS	Safety Data Sheet
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
TWA	Time-Weighted Average
UN Number	United Nations Number
WES-STEL	Workplace exposure standards – Short-term exposure limit
WES-TWA	Workplace exposure standards – Time-weighted average

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.