

1: Identification of the Substance and Supplier

Product Name Recommended Use Suppliers Details

Web Address Email Address Telephone Number Emergency Telephone National Poison Centre Date of Issue/Revision

CHLORBACK 75WG Herbicide Orion AgriScience Ltd Unit 1, 15 Sir Gil Simpson Drive, Harewood, Christchurch, 8053 PO Box 39 071, Harewood, Christchurch, 8545 www.orionagriscience.co.nz orders@orionagriscience.co.nz (03) 928 2386 (office hours), 0800 674 6627 (free phone) 0800 CHEMCALL (0800 243 622) (24 hours) 0800 POISON (0800 764 766) (24 hours) March 2025

2: Hazards Identification

Hazard Pictograms

Signal Words	Warning
Hazard Classes:	Hazard Statements:
Eye Irritation (Cat. 2)	H319 Causes serious eye irritation
Specific target organ toxicity (repeated exposure) (Cat. 2)	H373 May cause damage to organs through prolonged or repeated exposure
Hazardous to the aquatic environment chronic (Cat. 2)	H411 Toxic to aquatic life with long lasting effects
Precautionary Statements:	
Prevention	P264 Wash hands thoroughly after handling
	P280 Wear eye protection / face protection
	P260 Do not breathe dust/fume/gas/mist/vapours/spray
	P273 Avoid release to the environment
	Keep out of reach of children. Read label before use. Avoid contact with eyes and skin.
	Do not breathe in the spray mist. When mixing or applying, wear personal protection as
	described in section 8. Take all reasonable steps to ensure that this product does not
	cause any significant adverse effects to the environment beyond the application area. Do
	not apply directly into or onto water.
Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do so. Continue rinsing
	P337+P313 If eye irritation persists: Get medical advice/attention
	P314 Get medical advice/attention if you feel unwell
	P391 Collect spillage
	First aid measures described in section 4. Contain and collect spillage for disposal. In an
	emergency call 111, Police or Fire Brigade. For specialist advice in an emergency only,
	call 0800 CHEMCALL (0800 243 6225) (24 hrs).
Storage	Keep out of reach of children.
Disposal	P501 Dispose of contents by using it in accordance with this label. Dispose of the
	container via AgRecovery after triple rinsing (use the rinsate for spraying).

Ingredient	CAS No
Chlorthal-dimethyl (active ingredient)	1861-32-1
Other ingredients	Proprietary



Content (% w/w) 75 Remainder

4: First Aid Measures

If medical advice is needed, have product container or label at hand. For advice call the National Poisons Centre or a Doctor		
Ingestion:	Seek medical advice if feeling unwell	
Skin Contact:	Wash with plenty of soap and water. Seek medical advice if irritation occurs.	
Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do so. Continue rinsing. Seek medical advice if irritation persists.	
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Seek medical advice if feeling unwell.	
Workplace Facilities:	Hand wash facility. Eye wash facility	
Advice to Doctor:	No specific antidote. Treat symptomatically	
National Poison Centre	0800 POISON (0800 764 766) (24 hours)	
Symptoms of Exposure which could occur if this material is not handled in accordance with instructions:		
Ingestion:	Nausea, vomiting, diarrhoea.	
Skin Contact:	Irritation	
Eye Contact:	Irritation	
Inhalation:	May cause irritation	

5: Fire-Fighting Measures		
Fire/Explosion Hazard	Non-flammable. As with many dusts, an explosive air/dust mixture may be formed if rough handling	
	liberates dust from the granules in enclosed or poorly ventilated areas.	
HAZCHEM Code	2Z	
ERP Guide No	47	
Extinguishing Media	Water spray, foam, dry chemical or C02. Avoid water jet.	
Fire Fighting Instructions	During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff.	
Specific Hazards Arising from Fire	No data available	

6: Accidental Release Measures	
Personal Precautions	Wear protective clothing as described in section 8. Do not inhale dust. Exclude non-essential people from
	the area.
Environmental Precautions	Prevent further spillage or leakage. Prevent material from entering drains, waterways, etc.
Clean Up	Moisten to prevent dusting and carefully sweep up. Collect and place in a sealable container for disposal.
	Wash down affected area with water and detergent. Absorb and collect washings for disposal. Dispose of
	safely to a suitable landfill.

7: Handling and Storage	
Storage:	Keep out of reach of children. Store in the original tightly closed container in a secure area.
Handling and Use:	Keep out of reach of children. Refer to Prevention statements in section 2 above. Keep people and animals
	away from the area while spraying and for the duration of the REI.
Temporary use restrictions	This substance is subject to temporary use restrictions. Any use of the substance must be in accordance
	with the restrictions detailed in the section 64A decision: https://www.epa.govt.nz/links/chlorthal-dimethyl
REI	Until spray has dried. However, Pregnant individuals or individuals that may be pregnant must not enter
	the application plot for five days post application.

8: Exposure Controls / Personal Protection



Tolerable Exposure Limit	None established
Workplace Exposure Standards	None established
Engineering Controls	Select spray application equipment to minimize exposure to operator and bystanders
Personal Protection:	
Eye	Safety glasses/goggles when mixing or applying
Skin	Cotton overalls snugly fitting at the neck, wrist and ankle, boots and waterproof gloves when mixing and
	applying
Respiratory	Not required where dust or spray mist is not inhaled. Otherwise, respirator (organic vapour and particulate
	matter) is required.

Clean protective equipment after use

9: Physical and Chemical Prope	rties
Appearance	Off White Granule
Odour	Mild musty
Odour Threshold	Does not apply
рН	6 - 8 (1% dispersion)
Melting Point/Freezing Point	Does not apply
Boiling Point	Does not apply
Flash Point	Does not apply
Flammability	Not flammable
Upper/Lower Flammability Limits	Does not apply. As with many dusts, an explosive air/dust mixture may be formed if rough handling
	liberates dust in enclosed or poorly ventilated areas
Vapour Pressure	Does not apply
Vapour Density	Does not apply
Relative Density	Does not apply
Solubility in Water	Dispersible
Partition Coefficient: n-octanol/water	See section 12
Auto ignition Temperature	Does not apply
Decomposition Temperature	Does not apply
Kinematic Viscosity	Does not apply
Particle characteristics	Does not apply

10: Stability and Reactivity	
Stability	Stable under normal conditions
Hazardous Reactions	None Expected
Incompatibility	None Known
Hazardous Decomposition Products	None Known

11: Toxicological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

Acute Oral Toxicity	LD50 > 5000 mg/kg
Acute Dermal Toxicity	LD50 > 5000 mg/kg
Acute Inhalation Toxicity	LD50 > 5 mg/L
Skin corrosion/irritation	Irritation
Serious eye damage/Eye irritation	Irritation
Respiratory or skin sensitisation	Information not available
Germ cell mutagenicity	Information not available
Carcinogenicity	Information not available
Reproductive Toxicity	Possible endocrine effects on fetal development from exposure to chlorthal-dimethyl



Specific Organ Toxicity – Single	Information not available	
exposure		
Specific Organ Toxicity – Repeated	In animal feeding studies on chlorthal dimethyl, signs of toxicity included mild to moderate tremors,	
exposure	wheezing, and nasal discharge. Beginning with the 2nd week, small skin lesions were noted on the face	
	and head. Lesion severity increased and some gradually developed into deep sores. All animals survived	
	the 28-day period. There was insufficient data to compare body weight gains and food consumption.	
	Pathological changes included dark and congested livers, congested and pale kidneys and spleens; and	
	kidney and liver weights were higher	
Aspiration hazard	Information not available	

12: Ecological Information		
This section describes effects which cou	Id occur if this material is not handled in accordance	with this data sheet and label instructions
The following information is present	ed in respect of the active ingredient:	
Ecotoxicity	Acute Oral LD50 (Mammal) >5000 mg/kg	
	• LC50 (48 hr) (Rainbow trout) >4.7 mg/l	
	• EC50 (48 hr) (Daphnia) >4.6 mg/l	
	• EC50 (72 hr) (Algae) >10 mg/l	
	Non-toxic to bees.	
Persistence/degradability	Biodegradable	DT50 (soil) 59 days (typical)
Bioaccumulative Potential	Octanol-water partition coefficient	LogP = 4.28 (high)
Soil Mobility	Soil organic carbon water partitioning coefficient	Koc = 2963 (slightly mobile
Environmental Exposure Limit:	None established	

13: Disposal Considerations	
Product	Dispose of product by using it in accordance with the label. Waste product should be disposed of to a
	suitable landfill. For disposal of large quantities contact Orion AgriScience Ltd.
Container	Dispose of to a suitable landfill or via AgRecovery. Do not burn. Do not use packaging for any other
	purpose.

14: Transport Information	
Dangerous Goods	
UN Number	3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CHLORTHAL-DIMETHYL 75%)
Class	9
Subsidiary Class	None
Packing Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	1000 Kg
Passenger Service Vehicle	No restriction

15 Regulatory Information	
EPA Approval No	HSR000646
ACVM Registration No	P8676
Qualified Person	Not required
Certified Handler	Not required
Workplace Only	No
Tracking	Not required



Record Keeping	Not required
Site Requirements under EPA Notice	A hazardous substance location compliance certificate is not required
and HSWHS Regs:	A hazardous area is not required
and nowno negs.	• Separation distances for class 3 and class 6 substances to protected places and public places is
	not applicable
	Fire extinguishers are not required
	Signage is required for more than 1000 Kg
	An emergency response plan is required for more than 1000 Kg
	Secondary containment is not required
	Segregation from incompatible substances is not required
Temporary use restriction	This substance is subject to temporary use restrictions. Any use of the substance must be in accordance
	with the restrictions detailed in the section 64A decision: https://www.epa.govt.nz/links/chlorthal-dimethyl
	The restrictions are as follows:
	1. The substance can only be used as a pre-emergent herbicide on allium crops as a single treatment per calendar year.
	2. No mixing, loading, or application of the substance by pregnant individuals or individuals that may be
	pregnant.
	3. Pregnant individuals or individuals that may be pregnant must not enter the application plot for five days post application.
	4. Prior to application, signs must be erected at every vehicular and pedestrian point of entry to the
	application plot, and: a. The signs must remain in place for a minimum of five days post application of the substance; and
	b. signs must indicate:
	i. The name of the hazardous substance that has been applied;
	 Risk to fetal development from exposure of pregnant individuals; Pregnant individuals or individuals that may be pregnant must not enter the application plot
	until [DATE], where [DATE] is at least five days after application of the substance; and
	c. The signs must be compliant with the requirements specified in regulation 2.5(2)(c) of the Health and Safety at Work (Hazardous Substances) Regulations 2017.
	5. The substance must not be applied at a rate greater than 10.5 kg ai/ha.
	6. The substance must not be applied within 30 metres of any track or road accessible to the public,
	public hut, dwelling, township, beach, or anywhere there is recreational activity in the area. 7. The substance must only be applied by a low boom sprayer using coarse (or larger) spray droplets, as
	defined by the American Society of Agricultural and Biological Engineers ASABE Standard (ASAE S572).
	8. The substance must not be applied when wind speeds are less than 3 km/h or more than 20 km/h as
	measured at the application plot
Additional Requirements	Refer to NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans

sreview date 11 March 202 ssary		
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Acceptable D	aily Exposure – A daily dose, received via any route, below which no adverse effects are	
expected over	r a lifetime of exposure	
/M Agricultural C	compounds and Veterinary Medicines group of the Ministry of Primary Industries	
GHS category	GHS category	
ing A concentrat	A concentration that should not be exceeded at any time during any part of the working day	
tified Handler A qualificatio	n issued by a Compliance Certifier to handle and use particularly toxic substances (6.1A and	
6.1B)		
0 Time (days) f	or 50% reduction in concentration	
0 Concentration	Concentration required to produce an effect in 50% of organisms	
ironmental Exposure Limit Maximum co	Maximum concentration limit of a substance in an environmental medium, e.g., water, soil.	
Notice Hazardous Pr	Hazardous Property Controls Notice 2017	
Guide Dangerous G	Dangerous Goods – Initial Emergency Response Guide SNZ HB 76:2008	
Globally harn	nonized system of classification and labelling of chemicals	



Hazardous Substance Location	For locations storing hazard substances of certain classes above threshold quantities	
Compliance Certificate		
Hazardous Area	A designated area designed for the pressures of flow mobile substances. Defer AC(NIZC C0070.10.1.2000	
HAZCHEM Code	A designated area designed for the presence of flammable substances - Refer AS/NZS 60079.10.1:2009	
	Emergency action code for emergency services	
HSWHS Regs	Health and Safety at Work (Hazardous Substances) Regulations 2017	
LC50	Concentration that will kill 50% of organisms	
LD50	Dose that will kill 50% or organisms	
MTQ	Maximum Transport Quantity. The maximum amount of dangerous goods that can be transported by road	
	by the user	
Notification	Advance notice given to neighbours and other affected parties, of details of proposed application, and	
	other details as described	
Octanol-Water Partition Coefficient	The partition coefficient of a substance between n-octanol and water, used as the Logarithm base 10	
	form, as an indicator that a substance may bioaccumulate	
PDE	Permitted Daily Exposure - A daily dose below which no adverse effects are expected over a lifetime of	
	exposure	
Protected Place	Residential properties, schools, hospitals, kindys, factories, shops, warehouses, etc., and other places where	
	people assemble	
Public Place	A place frequented by the public, including roads (does not include private property)	
Qualified Person	A requirement for the loader, contractor or person applying the product to hold a qualification such as a	
	GROWSAFE Certificate, Unit Standard 21563, etc.	
Record Keeping	Includes a spray diary or other record of application	
REI	Restricted Entry Interval – The length of time after application before entry into the treated area is	
	permitted without the use of protective equipment. For indoor environments, this time period commences	
	once ventilation after treatment begins.	
Segregation	Certain classes of substances must not be in contact with, and must be stored separately from, certain	
	other classes as specified in HSWHS Regs	
Separation Distances	The distances specified in Part 11 and Part 13 of HSWHS Regs between storage and/or use of hazardous	
	substances and protected places and/or public places	
Signage	Positioned at entrances to commercial premises providing information on the hazardous substances	
	present	
Soil Adsorption Coefficient (Kd)	The ratio of the concentrations of a substance adsorbed onto a solid sorbent to that dissolved in a liquid	
	phase. The higher the value the less mobile the chemical is in soil	
Soil Organic Carbon-Water	The ratio of the mass of a chemical that is adsorbed in the soil per unit mass of organic carbon in the soil.	
Partitioning Coefficient (Koc)	The higher the value the less mobile the chemical is in soil	
STEL	Short term exposure level – 15 minute time weighted average	
Tolerable Exposure Limit	Maximum concentration limit of a substance above which persons must not be exposed	
Tracking	For some particularly hazardous substances, a record must be kept of the transport, storage, sale and	
	of the product	
TWA	Time weighted average calculated over an 8 hour working day	
Workplace Exposure Standard	An occupational health standard limiting concentrations of specified substances to which persons are	
	exposed	
Workplace Only	A product that is restricted to a workplace only and under the supervision of a certified handler	
Please Note		

Users must ensure that the most up to date version of this safety data sheet is used.

This Safety Data Sheet summarises information on this product, and how to safely handle and use the product. Each user should familiarise



themselves with the product label and Safety Data Sheet, and consider the information in the context of how the product will be handled and used, including in conjunction with other products. Orion AgriScience Ltd assumes no responsibility for the accuracy, completeness or suitability of this information. The user is responsible for determining the suitability and accuracy of this information for their particular purposes. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.