

Material Safety Data Sheet



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: ACHIEVE (R) WG HERBICIDE

Synonyms: Crop Care MSDS No. 41445

CAS-No.:

Molecular Formula:

Supplier: Crop Care Australasia Pty Ltd

ACN: 061 362 347

Street Address: 77 Tingira Street
Pinkenba 4008
Australia

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Emergency telephone number: 1 800 033 111 (ALL HOURS)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Recommended use: Herbicide.

Appearance: Blue granules.

CHEMICAL ENTITY	CAS NO.	PROPORTION
Tralkoxydim technical	87820-88-0	40% (400 g/kg)
Inorganic carrier	-	HIGH
Talc	-	MED
Surfactant	-	MED
Antifoam	-	VLOW
Colourant	-	VLOW

		100%

PROPORTION (% weight per weight):

VHIGH >60, HIGH 30-60, MED 10-29, LOW 1-9, VLOW <1

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS) or are National Registration Authority (NRA) approved active constituents.

3. HAZARDS IDENTIFICATION

Hazardous according to criteria of Worksafe Australia.

Hazard Category

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Xn Harmful

R-phrases

R22 Harmful if swallowed.
R63 Possible risk of harm to the unborn child.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

Poisons Schedule (Aust)/Toxic Substance (NZ): S5

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

4. FIRST AID MEASURES

Poison Information Centres in each State capital city can provide additional assistance for scheduled poisons.

Ingestion: Rinse mouth with water. Give plenty of water to drink. If vomiting occurs give further water. Seek medical assistance.

Eye contact: Irrigate with copious quantities of water for 15 minutes. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Skin contact: Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Specific hazards: Combustible solid. In common with many organic chemicals, may form flammable dust clouds in air. For precautions necessary refer to safety data sheet - "Dust Explosion Hazards".

Fire fighting further advice: Combustible solid. Decomposes on heating emitting toxic fumes of nitrogen and carbon oxides. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of decomposition.

Suitable extinguishing media: Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

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SMALL SPILLS: Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers for disposal.

LARGE SPILLS: Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled drums for disposal. Wash area down with detergent and excess water. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.

7. HANDLING AND STORAGE

Storage: Store in the closed, original container in a dry, cool, well ventilated area. Do not store for prolonged periods in direct sunlight

This product does not meet the criteria for classification as Dangerous Goods Class 4.2 (spontaneously combustible) but does present the possibility of self-ignition if exposed to high temperatures. Do not store in direct sunlight or in unventilated storage sheds.

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits

No value assigned for this specific material by the National Occupational Health and Safety Commission (Worksafe Australia).

However, Exposure Standards for constituents:

	TWA	
	ppm	mg/m ³
Tralkoxydim*	-	1.5
Talc**	-	2.5

*Supplier recommended (1)

**As published by the National Occupational Health and Safety Commission (Worksafe Australia).

TWA - the Time-Weighted Average airborne concentrations over an eight-hour working day, for a five-day working week over an entire working life.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure Standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product will not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

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Engineering measures: Ensure ventilation is adequate to maintain air concentrations of components are controlled below quoted Exposure Standards. Avoid generating and inhaling dusts. Keep containers closed when not in use.

Personal protection equipment: Orica Personal Protection Guide No.1, 1998: E - OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES (S), DUST MASK.

MANUFACTURE, PACKAGING AND TRANSPORT: Avoid eye contact, repeated or prolonged skin contact and the inhalation of dust. Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Wash contaminated clothing and other protective equipment before storing or re-using. Always wash hands before smoking, eating, drinking or using the toilet.

PREPARATION AND USE OF PRODUCT: When preparing the spray wear face shield and goggles. Wash hands after use. After each day's use wash face shield and goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Blue granules.

Solubility: Dispersible in water.

Specific Gravity (25 C)	: 1.16	Melting Point (C)	: N Av
Rel Vapour Density (air=1)	: N App	Boiling Point (C)	: N App
Vapour Pressure (20 C)	: N App	Decomp. Point (C)	: N Av
Flash Point (C)	: N App	Sublimation Point	: N App
Flammability Limits (%)	: N App	pH (20 C)	: N APP
Autoignition Temp (C)	: N Av	Viscosity	: N App
% Volatile by volume	: N Av	Evaporation Rate	: N App
Solubility in water (g/L)	: N Av	(n-Butyl acetate=1)	
Minimum Ignition Temperature	: 550-600 C		
LogPow	: 2.1		

(Typical values only - consult specification sheet)
N Av = Not available N App = Not applicable

10. STABILITY AND REACTIVITY

Stability: No information available.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

Acute Effects

Ingestion: Swallowing can result in nausea, vomiting and abdominal pain. (1)

Eye contact: Maybe an eye irritant.

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Skin contact: Contact with skin may result in irritation.

Inhalation: Inhalation of dust may result in respiratory irritation.

Long Term Effects

Evidence from animal tests indicate that tralkoxydim may cause harm to the unborn child in exposed mothers. (1) This effect is unlikely to occur in humans, provided exposure is maintained at or below the recommended occupational exposure limit.

Acute toxicity / Chronic toxicity

No LD50 available for the product. However, for the constituent, TRALKOXYDIM: (1)

Oral LD50 (rat, female): 934 mg/kg.

Oral LD50 (rat, male): 1324 mg/kg.

Oral LD50 (mice, female): 1100 mg/kg.

Oral LD50 (mice, male): 1231 mg/kg.

Oral LD50 (rabbit, male): >519 mg/kg.

Dermal LD50 (rat): >2000 mg/kg.

Inhalation LC50 (rat): >3.5 mg/L/4hr.

SKIN: Mild irritant (rabbit). Not a skin sensitiser (guinea pig).

EYES: Mild irritant (rabbit).

Studies in animals have shown that tralkoxydim is not mutagenic nor carcinogenic. Benign leydig cell tumours were observed in a rat study but this is believed not to represent a hazard in man.

A reproductive study in the rat has shown that repeated doses produce embryo/foetotoxic effects in the absence of maternal toxicity. The no effect level was 3 mg/kg/day.

Tralkoxydim was non-teratogenic in rabbits. However, studies in rats have shown that high doses produce teratogenic effects in the presence of severe maternal toxicity.

ADI (Acceptable Daily Intake) for humans is 0.005 mg/kg/day. (2)

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

For TRALKOXYDIM: (1)

AQUATIC TOXICITY:

Toxic to aquatic organisms.

96hr LC50 (mirror carp): >8.2 mg/L.

96hr LC50 (bluegill sunfish): >6.1 mg/L.

96hr LC50 (rainbow trout): >7.2 mg/L.

TERRESTRIAL TOXICITY:

Oral LD50 (mallard ducks): >3020 mg/kg.

Oral LD50 (partidges): 4430 mg/kg.

Dietary LC50 (quail): 6237 mg/kg.

Dietary LC50 (mallard ducks): >7400 mg/kg.

Oral LD50 (bee): 0.054 mg/bee.

Dermal LD50 (bee): >0.1 mg/bee.

LogPow is 2.1

Risk of bioaccumulation in an aquatic species is low.

ENVIRONMENTAL FATE, DISTRIBUTION AND PERSISTENCE

Tralkoxydim solubility is increased with increasing pH. At pH5

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5 mg/L), at pH6.5 (6.7 mg/L) and at pH9 (9800 mg/L).
Tralkoxydim is a solid of low volatility which has low mobility in soil. It degrades rapidly in crops and soil, with half lives between 3 days (aerobic) and 25 days (flooded soil).

13. DISPOSAL CONSIDERATIONS

5kg CONTAINER Shake box empty into spray tank. Single rinse bag before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Puncture or shred and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

50kg CONTAINER Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

15. REGULATORY INFORMATION

Hazardous according to criteria of Worksafe Australia.

Hazard Category

Xn Harmful

R-phrases(s)

R22 Harmful if swallowed.
R63 Possible risk of harm to the unborn child.

S-phrases(s)

S36 Wear suitable protective clothing.
S44 If you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible).

Poisons Schedule (Aust)/Toxic Substance (NZ): S5

16. OTHER INFORMATION

Literary reference

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- (1) Material Safety Data Sheet - Tralkoxydim Technical (CDS 16542)
Orica Australia Pty Ltd. 02/98
- (2) ADI List, Commonwealth Department of Health and Family Services.
04/97

This Material Safety Data Sheet has been prepared by SHE Pacific Pty Ltd on behalf of Orica Ltd and its subsidiary companies.

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Reason(s) For Issue: Three yearly update.

Alignment to Worksafe requirement.

New Toxicological data.

Change in Environmental data.

Change in Personal Protection Requirements.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Orica Limited and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.