

Material Safety Data Sheet



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

Product name: ATRADEX (R) WG HERBICIDE

Synonyms: Crop Care MSDS No. 32615

CAS-No.:

Molecular Formula:

Supplier: Crop Care Australasia Pty Ltd

ACN: 061 362 347

Street Address: 77 Tingira Street
Pinkenba
Queensland 4008
Australia

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Recommended use: Triazine herbicide.

Appearance: Blue granules with a slight odour.

CHEMICAL ENTITY	CAS NO.	PROPORTION
Atrazine tech.	1912-24-9	90% (900 g/kg)
Other ingredients determined not to be hazardous-	-	LOW

		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

This material is hazardous according to health criteria of Worksafe Australia.

Hazard Category

Xn Harmful
Xi Irritant

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R-phrases(s)

R20/22	Harmful by inhalation and if swallowed.
Carc. Cat 3; R40	Possible risk of irreversible effects.
Muta. Cat 3; R40	Possible risk of irreversible effects.
R43	May cause sensitisation by skin contact.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and 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

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone (Australia 13 1126; New Zealand 03 4747000).

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

Eye contact: Irrigate with copious quantities of water for at least 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 swelling, redness, blistering or 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". Care must be taken to avoid build up of electrostatic charges on air filter bags. Filter bag baskets must be earthed.

Fire fighting further advice: Combustible solid. On burning will emit toxic fumes. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

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. Sweep or vacuum up, 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, well ventilated area as cool as possible out of direct sunlight and away from children, animals, food, feedstuffs, seed and fertilisers.

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 Standard for constituent:

	TWA	
	ppm	mg/m ³
Atrazine	-	5

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 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 should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Engineering measures: IN THE WORKPLACE: Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Keep containers closed when not in use.

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Personal protection equipment: OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES (Short), DUST MASK.

Code:E -Orica Personal Protection Guide No.1, 1998,

MANUFACTURE, PACKAGING AND TRANSPORT: Avoid skin and eye contact and 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. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

PREPARATION AND USE OF PRODUCT: Avoid contact with eyes and skin. Do not inhale dust or spray mist. When preparing the spray and using the prepared spray wear elbow length PVC gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each days use wash gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Blue granules with a slight odour.

Solubility: Dispersible in water.

Specific Gravity (20 C)	: 0.90	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 Av	pH	: N Av
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)	
LogPow (Atrazine)	: 2.5		

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

10. STABILITY AND REACTIVITY

Stability: Product is stable for at least two years under ambient storage conditions.

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 and overexposure occurs are:

Acute Effects

Ingestion: No adverse effects expected, however large amounts may cause nausea and vomiting. (1)

Eye contact: Not expected to be an eye irritant. (2)

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Skin contact: Not expected to be a skin irritant. A skin sensitizer. Repeated or prolonged skin contact may lead to allergic contact dermatitis

Inhalation: Inhalation of dust may result in respiratory irritation.

Long Term Effects

Some animal test data suggests a carcinogenic potential for atrazine. These particular data sets are not considered relevant to normal industrial/agricultural use, but do emphasize the need for care in handling. (2)

Acute toxicity / Chronic toxicity

No LD50 data available for the product. However, for the constituent,

ATRAZINE: (1)

Oral LD50(rat): 1869-3080 mg/kg.

Inhalation LC50 (rat): >5100 mg/m³/1hr.

Dermal LD50 (rabbit): >3100 mg/kg.

SKIN: Non irritant (rabbit). A skin sensitizer (guinea pig).

EYES: Non irritant (rabbit).

In two year feeding studies, NOEL's (No Observable Effect Level's) of 3.75 and 0.5 mg/kg/bw/day were reported in dog and rat, respectively.

There was a slight increase in mammary tumours in female Sprague-Dawley rats dosed with atrazine tech.

However, more recent studies involving other rat strains have shown no evidence of tumour producing potential.

ADI (Acceptable Daily Intake) for humans is 0.005 mg/kg/day. (3)

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

For ATRAZINE: (1)

AQUATIC TOXICITY:

Toxic to aquatic organisms.

96hr LC50 (rainbow trout): 4.5-11 mg/L.

96hr LC50 (carp): 76 mg/L.

96hr LC50 (bluegill sunfish): 16 mg/L.

96hr LC50 (catfish): 7.6 mg/L.

96hr LC50 (guppy): 4.3 mg/L.

24hr LC50 (Daphnia magna): 87 mg/L.

Highly toxic to algae

72 hour EC50 (algae): 0.043 mg/L.

LogPow is 2.5

Risk of bioaccumulation in an aquatic species is low.

TERRESTRIAL TOXICITY

Oral LD50 (bee): >97 ug/bee.

Dermal LD50 (bee): >100 ug/bee.

13. DISPOSAL CONSIDERATIONS

Shake box empty into spray tank. Single rinse plastic bag. 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

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purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

This material is hazardous according to health criteria of Worksafe Australia.

Hazard Category

Xn	Harmful
Xi	Irritant

R-phrase(s)

R20/22	Harmful by inhalation and if swallowed.
Carc. Cat 3; R40	Possible risk of irreversible effects.
Muta. Cat 3; R40	Possible risk of irreversible effects.
R43	May cause sensitisation by skin contact.

S-phrase(s)

S1/2	Keep locked up and out of reach of children.
S13	Keep away from food, drink and animal foodstuffs.
S36/37	Wear suitable protective clothing and gloves.

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

16. OTHER INFORMATION

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Literary reference

- (1) Material Safety Data Sheet - Atrazine tech. (CDS 15100)
Orica Australia Pty Ltd. 11/98
- (2) In "Handbook of Pesticide Toxicology". Vol 3 Classes of Pesticides. Ed
Hayes Jr W and Laws Jr E. Academic Press Inc, 1991.
- (3) ADI List, Commonwealth Department of Health and Family Services
01/2000.

This Material Safety Data Sheet has been prepared by SHE Pacific Pty Ltd on behalf of its clients.
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Reason(s) For Issue: ALIGNMENT TO WORKSAFE 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.