

Material Safety Data Sheet

Based on available information, not classified as hazardous according to criteria of NOHSC.

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

1. Identification of the substance/preparation and of the company/undertaking

Product Name: AFFINITY 400 DF HERBICIDE

Synonyms: (R) Affinity is a Registered Trade Mark of FMC Corporation. MSDS No. FMC/AFF/1

Supplier: FMC (Chemicals) Pty. Limited

ABN: 095 326 891

Street Address: 77 Tingira Street
Pinkenba, Queensland 4008
Australia

Telephone Number: +61 7 3867 9100

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Emergency Telephone: 1 800 033 111 (ALL HOURS)

2. Composition/information on ingredients

Product Description: Post emergence herbicide.
Light to dark brown granules with a slightly musty odour.

Other ingredients determined not to be hazardous	30-60%	-
Carfentrazone-ethyl 128639-02-1	40% (400 g/kg)	Non hazardous

3. Hazards identification

Poisons Schedule: None allocated.

4. First-aid measures

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126; New Zealand 03 474 7000).

Inhalation: Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Skin Contact: If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If irritation occurs seek medical advice.

Eye Contact: If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, give a glass of water to drink. Seek medical advice.

Notes to physician: Treat symptomatically.

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5. Fire-fighting measures

Specific Hazards: Combustible solid.
Fire-fighting advice: On burning will emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing 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

SMALL SPILLS: Wear protective equipment to prevent skin and eye contact. 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 or re-use.

LARGE SPILLS: Wear protective equipment to prevent skin and eye contact. Avoid breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers, bags or drums for disposal or re-use. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.

7. Handling and storage

Handling advice: Avoid skin and eye contact.

Storage advice: Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers.

8. Exposure controls/personal protection

Occupational Exposure Limits:
No value assigned for this specific material by the National Occupational Health and Safety Commission.

Engineering Control Measures:
IN THE WORKPLACE: Use in well ventilated areas. Keep containers closed when not in use.

Personal Protective Equipment:
Orica Personal Protection Guide No. 1, 1998: B - OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.

MANUFACTURE, PACKAGING AND TRANSPORT: Wear overalls, safety glasses and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

If risk of inhalation exists, wear dust mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

PREPARATION AND USE OF PRODUCT: Avoid contact with eyes and skin. Do not inhale dust. When using product wear elbow length PVC gloves and face-shield or goggles. Wash hands after use. After each day's use, wash gloves and face-shield or goggles and contaminated clothing.

9. Physical and chemical properties

Physical state: Granular
Colour: Brown
Odour: Musty

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Solubility:	Dispersible in water.
Specific Gravity:	0.49-0.55
Relative Vapour Density (air=1):	N App
Vapour Pressure (20 °C):	N App
Flash Point (°C):	N Av
Flammability Limits (%):	N Av
Autoignition Temperature (°C):	N Av
% Volatile by Weight:	N Av
Solubility in water (g/L):	N Av
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	N App
Decomposition Point (°C):	N Av
Sublimation Point (°C):	N App
pH:	6.6 (1% solution)
Viscosity:	N Av
Partition Coefficient:	(Carfentrazone-ethyl): 3.36

10. Stability and reactivity

Stability: Product is stable for at least 2 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 or effects that may arise if the product is mishandled and overexposure occurs are:

- Ingestion:** No adverse effects expected, however, large amounts may cause nausea and vomiting.
Eye contact: Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.
Skin contact: Repeated or prolonged skin contact may lead to irritation.
Inhalation: Breathing in dust may result in respiratory irritation.

Long Term Effects:

No information available for the product.

Toxicological Data:

PRODUCT DATA:

Oral LD50 (rat):	>5,000 mg/kg.
Dermal LD50 (rabbit):	>5,000 mg/kg.
Inhalation LC50 (rat):	>5.72 mg/L/4hr.
SKIN:	Non-irritant. Not a skin sensitizer (guinea pig).
EYES:	Mild irritant (rabbit).

In studies using laboratory animals carfentrazone-ethyl did not cause reproductive, developmental nor carcinogenic effects.

Negative in in vitro tests for genotoxicity.

ADI (Acceptable Daily Intake) for humans is 0.03 mg/kg bw/day.

12. Ecotoxicological information

Avoid contaminating waterways.
For CARFENTRAZONE-ETHYL:

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Environmental fate, persistence and degradation:

Carfentrazone-ethyl is rapidly degraded in soils under aerobic and anaerobic conditions. The half life in soil is 1-2 days. It is rapidly hydrolysed at pH 9 but stable at pH 5. Field studies show that carfentrazone-ethyl has low mobility in soil.

Aquatic toxicity:

Toxic to aquatic organisms. Bioconcentration factor in fish of 167. Risk of bioaccumulation in an aquatic species is low.

Log Octanol/Water Partition Coefficient: 3.36
48hr EC50 (Daphnia magna): 9.8 mg/L.
96hr LC50 (fish): 1.6-43 mg/L.

Terrestrial toxicity:

Harmless to terrestrial species. Non-toxic to bees.

Oral LD50 (bobwhite quail): >1,000 mg/kg.
Oral LD50 (ug/bee): >35 ug/bee.
Contact LD50 (ug/bee): >200 ug/bee.

13. Disposal considerations

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not 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

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

Classification: Based on available information, not classified as hazardous according to criteria of NOHSC.
Risk Phrase(s): No risk phrases allocated.
Safety Phrase(s): No safety phrases allocated.
Poisons Schedule: None allocated.

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.

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16. Other information

Supplier Material Safety Data Sheet; 2000.

In: 'The Pesticide Manual'. 12th Edition. Ed. CDS Tomlin. British Crop Protection Society, 2000.

ADI List, Commonwealth Department of Health and Family Services. 2001.

Reason(s) for Issue:

First Issue Primary MSDS

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since FMC Corporation cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their FMC Corporation representative or FMC Corporation direct at the contact details on page 1.

FMC Corporation's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

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