



Material Safety Data Sheet

This material is 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: HAMMER HERBICIDE

Supplier: FMC (Chemicals) Pty. Limited
ABN: 095 326 891
Street Address: 77 Tingira Street
Pinkenba, Queensland 4008
Australia
Telephone Number: +61 7 3867 9100
Facsimile: +61 7 3867 9110

Emergency Telephone: 1 800 033 111 (ALL HOURS)

2. Composition/information on ingredients

Product Description: Herbicide.
Yellow-orange liquid.

Solvent naphtha (petroleum)heavy arom. 64742-94-5	67% (720 g/L)	R65
N-methyl-2-pyrrolidone 872-50-4	1-9%	R36/38
Carfentrazone-ethyl 128639-02-1	22% (240 g/L)	Non hazardous

3. Hazards identification

Risk Phrases: Harmful: May cause lung damage if swallowed.

Poisons Schedule: S5 Caution.

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. 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.

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

Product Name: HAMMER HERBICIDE
Substance No: 00000007539

Issued: 19/02/2002 **Version:** 1



Material Safety Data Sheet

Eye Contact: seek medical advice.
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, do NOT induce vomiting. Give a glass of water. Seek medical advice.

Notes to physician: Treat symptomatically.

5. Fire-fighting measures

Specific Hazards: Combustible liquid.

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: Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal.

LARGE SPILLS: Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. 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 and breathing in vapour. Keep out of reach of children.

Storage advice: Do NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in the closed, original container, in a cool, well-ventilated area out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilizers.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

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. Use with local exhaust ventilation or while wearing organic vapour/particulate respirator. Keep containers closed when not in use.

Personal Protective Equipment:

Product Name: HAMMER HERBICIDE
Substance No: 00000007539

Issued: 19/02/2002 **Version:** 1



Material Safety Data Sheet

Orica Personal Protection Guide No. 1, 1998: G - OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES (Short), RESPIRATOR.

MANUFACTURE, PACKAGING AND TRANSPORT: Wear overalls, safety glasses and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate 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. When opening container and preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles. Wash hands after use.

9. Physical and chemical properties

Physical state:	Liquid
Colour:	Yellow / Orange
Odour:	Solvent
Solubility:	Dispersible in water.
Specific Gravity:	1.074
Relative Vapour Density (air=1):	N Av
Vapour Pressure (20 °C):	N Av
Flash Point (°C):	>60.5
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 Av
Decomposition Point (°C):	N Av
Sublimation Point (°C):	N App
pH:	N App
Viscosity:	N Av
Partition Coefficient:	3.36 (Carfentrazone-ethyl)

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: Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung).

Eye contact: May be an eye irritant.

Skin contact: Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

Inhalation: Breathing in vapour can result in headaches, dizziness and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

Product Name: HAMMER HERBICIDE
Substance No: 00000007539

Issued: 19/02/2002

Version: 1



Material Safety Data Sheet

Long Term Effects:

No information available for the product.

Toxicological Data:

CARFENTRAZONE-ETHYL 240 EC:

Oral LD50 (rat):	>4,000 mg/kg.
Dermal LD50 (rabbit):	>4,000 mg/kg.
Inhalation LC50 (rat):	>6,31 mg/L/4hr.
SKIN:	Mild irritant (rabbit). Not a skin sensitiser (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.

The toxicity of the product may be attributed to the solvents it contains which may cause central nervous system depression. Additive effects may occur with mixtures of solvents. Similar effects can occur where the consumption of alcohol is also involved.

12. Ecotoxicological information

Avoid contaminating waterways.

For CARFENTRAZONE-ETHYL:

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 206. 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

Product Name: **HAMMER HERBICIDE**
Substance No: **00000007539**

Issued: **19/02/2002** Version: **1**



Material Safety Data Sheet

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: This material is hazardous according to criteria of NOHSC.
Xn: Harmful

Risk Phrase(s): R65: Harmful: May cause lung damage if swallowed.

Safety Phrase(s): S2: Keep out of the reach of children.
S13: Keep away from food, drink and animal foodstuffs.
S24/25: Avoid contact with skin and eyes.
S36: Wear suitable protective clothing.

Poisons Schedule: S5 Caution.

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.

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 Crop Care Australasia

Product Name: HAMMER HERBICIDE
Substance No: 00000007539

Issued: 19/02/2002 **Version:** 1



Material Safety Data Sheet

Pty Ltd 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 Crop Care representative or Crop Care Australasia Pty Ltd at the contact details on page 1.

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

Product Name: *HAMMER HERBICIDE*
Substance No: *00000007539*

Issued: *19/02/2002*

Version: *1*