

# Material Safety Data Sheet



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

**Product name:** THISTLE KILLEM (R) SELECTIVE HERBICIDE

**Synonyms:** Crop Care MSDS No. 42421, Crop King Thistle Killem

**CAS-No.:**

**Molecular Formula:**

**Supplier:** Crop Care Australasia Pty Ltd

**ACN:** 061 362 347

**Street Address:** 77 Tingira Street  
Pinkenba 4008  
Australia

**Telephone:** + 61 7 3867 9100

**Facsimile:** + 61 7 3867 9110

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

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Recommended use:** Herbicide.

**Appearance:** Brown liquid with an amine odour.

CHEMICAL ENTITY	CAS NO.	PROPORTION
Water	7732-18-5	HIGH
MCPA as the amine salt	19480-39-8	HIGH
Wetting agent	-	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

Xn Harmful  
Xi Irritant

**Product name:** THISTLE KILLEM (R) SELECTIVE HERBICIDE

**Substance Key:** 000504242101

**Issued:** 01.07.1997

**Version:** 1.0

**Page:** 1 of 6

# Material Safety Data Sheet



## R-phrases(s)

R22 Harmful if swallowed.  
R38 Irritating to skin.  
R41 Risk of serious damage to eyes.

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): S6

This material is a Scheduled Poison S6 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:** Give plenty of water to drink. If more than 15 minutes from a hospital induce vomiting using fingers in the throat or Ipecac Syrup APF. Seek immediate medical assistance.

**Eye contact:** Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

**Skin contact:** Immediately wash contaminated skin with plenty of 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. Seek medical advice if effects persist.

**Notes to physician:** Treat symptomatically. Treat as for 2,4-D.

2,4-D TREATMENT INFORMATION: (2)

Quinidine sulfate has been used to prevent cardiac arrhythmia and to treat dysfunction of skeletal muscle. Successfully treated cases of 2,4-D poisoning indicate that forced alkaline diuresis is helpful in reducing the level of 2,4-D in the blood and tissues.

## 5. FIRE-FIGHTING MEASURES

**Specific hazards:** Non combustible material.

**Fire fighting further advice:** Not combustible, however following evaporation of aqueous component residual material can burn if ignited. On burning will emit toxic fumes including those of hydrogen chloride and phosgene. 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

Product name: THISTLE KILLEM (R) SELECTIVE HERBICIDE

Substance Key: 000504242101

Issued: 01.07.1997

Version: 1.0

Page: 2 of 6

# Material Safety Data Sheet



Wear protective equipment to prevent skin and eye contamination. Contain - prevent runoff into drains and waterways. Use absorbent (soild, sand or other inert material). 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 cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers.

This material is a Scheduled Poison S6 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).

**Engineering measures:** Use in a well ventilated area. Keep containers closed when not in use.

**Personal protection equipment:** Orica Personal Protection Guide No.1, 1998: C - OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES (S).

**MANUFACTURE, PACKAGING AND TRANSPORT:** Avoid skin and eye contact and inhalation of vapour/mist. Wear overalls, chemical goggles and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using. If inhalation risk exists wear organic vapour/acid mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

**PREPARATION AND USE OF PRODUCT:** When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves and goggles. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles and contaminated clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form / Colour / Odour:** Brown liquid with an amine odour.

**Solubility:** Very soluble in water.

Specific Gravity (20 C)	: 1.127	Melting Point (C)	: N Av
Rel Vapour Density (air=1)	: N Av	Boiling Point (C)	: N Av
Vapour Pressure (20 C)	: N Av	Decomp. Point (C)	: N Av
Flash Point (C)	: N Av	Sublimation Point	: N App
Flammability Limits (%)	: N Av	pH	: N Av

**Product name:** THISTLE KILLEM (R) SELECTIVE HERBICIDE

**Substance Key:** 000504242101

**Issued:** 01.07.1997

**Version:** 1.0

**Page:** 3 of 6

# Material Safety Data Sheet



Autoignition Temp (C) : N Av                      Viscosity : N Av  
% Volatile by volume : N Av                      Evaporation Rate : N Av  
Solubility in water (g/L) : Soluble (n-Butyl acetate=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 irritation to the mouth, throat and stomach, nausea, vomiting and twitching of face muscles. Very large doses can lead to liver and kidney damage and unconsciousness. (1)

**Eye contact:** A severe eye irritant.

**Skin contact:** Contact with skin will result in irritation.

**Inhalation:** Inhalation of mists or aerosols may produce respiratory irritation.

### Long Term Effects

Evidence from animal studies indicate that repeated or prolonged exposure to large amounts of MCPA could result in liver and kidney damage. (1)

### Acute toxicity / Chronic toxicity

No LD50 data available for product. However for the active constituent, MCPA: (1)

Oral LD50 (rat): 900-1160 mg/kg.

Dermal LD50 (rat): >4000 mg/kg.

4hr Inhalation LC50 (rat): >6.36 mg/L.

MCPA is not genotoxic.

Oral doses of 0, 0.15, 0.75 or 3.75 mg/kg/day for 1 year to male and female beagle dogs resulted in kidney and liver toxicity at 0.75 and 3.75 mg/kg. The no effect level for systemic toxicity was 0.15 mg/kg.

## 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

MCPA: (3)

### AQUATIC TOXICITY

Low toxicity to aquatic organisms.

96hr LC50 (rainbow trout): 100 mg/L.

EC50 (Daphnia magna): 100 mg/L.

### TERRESTRIAL TOXICITY

# Material Safety Data Sheet



Oral LD50 (bobwhite quail): 377 mg/kg.

## 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

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
Xi	Irritant

### R-phrases(s)

R22	Harmful if swallowed.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.

### S-phrases(s)

S 2	Keep out of reach of children.
S13	Keep away from food, drink and animal feeding stuffs.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37	Wear suitable gloves.
S39	Wear eye/face protection.

Poisons Schedule (Aust)/Toxic Substance (NZ): S6

## 16. OTHER INFORMATION

### Literary reference

(1) In 'Handbook of Pesticide Toxicology Vol 3 Classes of Pesticides'.  
Eds. Hayes WJ and Laws ER), Academic Press, California, 1991, p 1334.

Product name: THISTLE KILLEM (R) SELECTIVE HERBICIDE

Substance Key: 000504242101

Issued: 01.07.1997

Version: 1.0

Page: 5 of 6

# Material Safety Data Sheet



(2) Safety Data Sheet -MCPA; CDS 17500 ICI Australia Operations Pty Ltd. 03/97.

(3) In 'The Pesticide Manual' 10th Ed. Ed Tomlin C, p 640  
Crop Protection Publications, UK 1994.

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

Contact Point: SHE Pacific Pty Ltd, MSDS Services

Within Australia: Telephone 1 800 624 132

Facsimile (03) 9665 7929

Outside Australia: Telephone +61 3 9665 7500

Facsimile +61 3 9665 7929

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.