

Material Safety Data Sheet

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Infosafe No. 610T9 Issue Date: October 1998 ISSUED by R&H

Product Name: **KERB(R) SELECTIVE HERBICIDE**

Classified as hazardous according to criteria of Worksafe Australia

COMPANY DETAILS

Company Name ROHM AND HAAS AUSTRALIA PTY LTD
Address 969 BURKE ROAD CAMBERWELL
VICTORIA 3124
Emergency Tel. 24HR- 1800 032 547
Tel/Fax Tel: (03) 9272 4222 Fax: (03) 9272 4254
Other Information This MSDS has been transcribed into Infosafe Worksafe Australia format from an original issued by the manufacturer on the date shown below. Any disclaimer by the manufacturer has not been included in the transcription.

IDENTIFICATION

Product Code 62789
Product Name KERB(R) SELECTIVE HERBICIDE
Proper Shipping Name None Allocated
Other Names

<u>Name</u>	<u>Mancode</u>
KERB (R) SELECTIVE HERBICIDE	

UN Number None Allocated
DG Class None Allocated
Packing Group None Allocated
Hazchem Code None Allocated
Poisons Schedule Not Scheduled

Physical Data

Appearance Off-white powdered solid; odorless.
Melting Point 154°C/309°F Estimate
Boiling Point Not applicable
Vapour Pressure <0.01 mm Hg @20°C/68°F
Specific Gravity (Water = 1): 0.20 to 0.25 g./cc. Bulk Density
Flash Point None Allocated
Flamm. Limit LEL Lower: 0.175 oz/ft³ 175.193 g/m³; Upper: No data

Other Properties

Volatile Component 0 to 2%
Autoignition Temp. 428°C/802°F
Vapour Density (Air=1) Not applicable
Other Information Viscosity: Not applicable
Solubility in Water: Dispersible
Evaporation Rate (BAC=1): Not applicable
See FIRE/EXPLOSION HAZARDS in the SAFE HANDLING INFORMATION Section.

Ingredients

<u>Ingredients</u>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Ethyleneglycol	107-21-1	2 %
	Ethylene glycol	107-21-1	2 %
	Silica, crystalline - Quartz	14808-60-7	0-1.25 %
	Aluminium silicate dihydrate	1332-58-7	44-48 %
	Related reaction products	None	
	Octylphenoxy polyethoxyethanol	9036-19-5	
	Sodium lignosulfonate	8061-51-6	

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Ingredients	Name	CAS	Proportion
	Pronamide (Propyzamide)	23950-58-5	50-54 %
Other Information	See EXPOSURE STANDARDS/PERSONAL PROTECTION in the PRECAUTIONS FOR USE INFORMATION Section.		

HEALTH HAZARD INFORMATION

Acute - Eyes	Direct contact with material can cause the following:- possible irritation.
Acute - Skin	Prolonged or repeated skin contact can cause the following:- possible skin irritation.
Acute - Inhaled	Inhalation of dust can cause the following:- irritation of nose and throat.
Other Information	PRIMARY ROUTES OF EXPOSURE: Inhalation Skin Contact Eye Contact

The active ingredient is classified as a Category 3 carcinogen according to criteria of Worksafe Australia.

DELAYED EFFECTS: Prolonged or repeated overexposure to ethylene glycol vapors may cause liver or kidney damage.

Prolonged or repeated overexposure to Pronamide can cause the following:

- adverse reproductive effects - liver damage.

The following chemicals have been listed by the US National Toxicology Program (NTP) as potentially anticipated to be cancer causing agent(s):

- silica, crystalline

Prolonged or repeated overexposure to Silica, crystalline - Quartz can cause the following:- silicosis, a pneumoconiosis which causes scar tissue.

First Aid

Swallowed	If swallowed, give 2 glasses of water to drink. Never give anything by mouth to an unconscious person.
Eye	Flush eyes with a large amount of water for at least 15 minutes. Consult a physician if irritation persists.
Skin	Wash affected skin areas thoroughly with soap and water. Consult a physician if irritation persists.
Inhaled	Move subject to fresh air.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Advice to Doctor

Advice to Doctor: If swallowed, careful evacuation of the stomach is advisable.

Other Information

PE 0R

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Exposure Limits	COMPONENT		R&H		NOHSC		ACGIH	
	NO.	UNIT	TWA	STEL	TWA	STEL	TWA	STEL
	1	mg/m3	0.1	None	None	None	None	None
	2	mg/m3	20 Skin	60 Skin	60 a	120 a	100 a	None
	3	mg/m3	None	None	None	None	2 b	None
	4		None	None	None	None	None	None
	5		None	None	None	None	None	None
	6		None	None	None	None	None	None
	7	mg/m3	0.1 b	None	c	c	0.1 b	None

- a Ceiling
- b Respirable Fraction
- c Under review
- 1 Pronamide (Propyzamide)
- 2 Ethylene glycol
- 3 Aluminium silicate dihydrate
- 4 Sodium lignosulfonate
- 5 Related reaction products
- 6 Octylphenoxypolyethoxyethanol
- 7 Silica, crystalline - Quartz

Eng. Controls Use local exhaust ventilation with a minimum capture velocity of 150 ft/min. (0.75 m/sec.) at the point of dust or mist evolution. Refer to Australian Standards AS1668.

Personal Protection

Protective Equip. RESPIRATORY PROTECTION: A respiratory protection program meeting AS1716 and AS1715 requirements must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in the EXPOSURE STANDARDS INFORMATION Section.
 Up to 10 times the TWA/TLV: Wear an Australian Standards approved (or equivalent) half-mask, air-purifying respirator.
 Up to 1000 ppm organic vapor: Wear an Australian Standards approved (or equivalent) full-facepiece, air-purifying respirator.
 Above 1000 ppm organic vapor or Unknown: Wear an Australian Standards approved (or equivalent) self-contained breathing apparatus in the positive pressure mode,
 OR,
 Australian Standards approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Air-purifying respirators should be equipped with an Australian Standards approved (or equivalent) cartridges for protection against pesticides.
 EYE PROTECTION: Use safety glasses (AS1337 or approved equivalent).
 HAND PROTECTION: Chemical-resistant gloves should be worn whenever this material is handled.
 The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant material may not provide adequate protection:
 - Butyl rubber
 Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.
 Rinse and remove gloves immediately after use. Wash hands with soap and water.
 OTHER PROTECTION: Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

Flammability

SAFE HANDLING INFORMATION

Storage and Transport

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Storage and Transport STORAGE CONDITIONS: Do not store this material near food, feed or drinking water. The minimum recommended storage temperature for this material is 0°C/32°F. The maximum recommended storage temperature for this material is 50°C/122°F. Store in a dry area. Store out of direct sunlight in a cool place.
HANDLING PROCEDURES: Do not handle material near food, feed or drinking water.
Avoid high concentrations of dust in air and accumulation of dust on equipment. An airborne dust of this material can create a dust explosion. When handling and processing this material local exhaust ventilation may be required to control dust and reduce exposure to vapors. To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity. Protect all equipment from explosions.
OTHER: Completely empty bag into application equipment. Dispose empty bag in a sanitary landfill or by incineration as allowed by state and local authorities. Avoid inhalation of smoke if incinerated.

Proper Shipping Name None Allocated

Spills and Disposal

Spills & Disposal ACCIDENTAL RELEASE MEASURES: Personal Protection: Appropriate protective equipment must be worn when handling a spill of this material. See EXPOSURE STANDARDS/PERSONAL PROTECTION in the PRECAUTIONS FOR USE INFORMATION Section for recommendations. If exposed to material during clean-up operations, see the FIRST AID PROCEDURES section for actions to follow. Remove all contaminated clothing promptly. Wash all exposed skin areas with soap and water immediately after exposure. Thoroughly launder clothing before reuse. Do not take clothing home to be laundered.
Procedures: Transfer spilled material to suitable containers for recovery or disposal. Keep dust to a minimum. CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.
DISPOSAL CONSIDERATIONS: Procedure: For disposal, incinerate this material at a facility that complies with local, state and federal regulations.

Fire/Explosion Hazard

Fire/Explos. Hazard UNUSUAL HAZARDS: Pesticide particulates can become airborne. Combustion generates toxic fumes of the following:- hydrogen chloride - nitrogen oxides - carbon oxides. Dusts at sufficient concentrations can form explosive mixtures with air. The minimum ignition temperature of dust cloud is 525°C/977°F. The minimum ignition temperature of dust layer is 150°C/302°F.
EXTINGUISHING AGENTS: Use the following extinguishing media when fighting fires involving this material:- carbon dioxide - dry chemical - water spray.
PERSONAL PROTECTIVE EQUIPMENT: Wear self-contained breathing apparatus (pressure-demand, AS1716 approved or equivalent) and full protective gear.
SPECIAL PROCEDURES: Contain run-off. Remain upwind. Avoid breathing smoke.

Hazardous Reaction INSTABILITY: This material is considered stable. However, avoid temperatures above 150°C/302°F.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield the following:- hydrogen chloride.
HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.
INCOMPATIBILITY: There are no known materials which are incompatible with this product.

Hazchem Code None Allocated

OTHER INFORMATION

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Toxicology

ACUTE DATA

Oral LD50 - rat: > 5000 mg/kg
Dermal LD50 - rabbit: > 2000 mg/kg
Eye irritation - rabbit: inconsequential irritation
Skin irritation - rabbit: practically non-irritating
Inhalation LC50 - rat: > 5 mg/L for 4 hr

SUBCHRONIC/CHRONIC DATA

The active ingredient is classified as a Category 3 carcinogen according to criteria of Worksafe Australia.

The following data pertains to studies conducted with the technical material 85% active ingredient:- Decreased body weight and food consumption; increased liver weight; liver thyroid, adrenal and pituitary hypertrophy were observed at 1000 ppm and above in the rat 13 week dietary study. The overall NOEL was 200 ppm (10 mg/kg/day) in rats.

Decreased body weight and food consumption; increased liver and adrenal weights and liver histopathology were observed at 500 ppm and above in the mouse 13 week dietary study. The overall NOEL was 100 ppm (16 mg/kg/day) in mice.

Decreased body weight gain and food consumption and increased liver weight were observed at 1350 ppm and above in the dog 13 week dietary study. The overall NOEL was 450 ppm (15 mg/kg/day) in dogs.

CARCINOGENICITY DATA

The following data pertains to studies conducted with the technical material 85% active ingredient:

Thyroid adenomas, testicular adenomas, ovarian hyperplasia and liver hypertrophy were observed at 1000 ppm in the rat two-year oncogenicity study the overall NOEL was 40 ppm (2 mg/kg/day) in rats.

Hepatic tumors were observed at 70 ppm and above in the mouse two-year oncogenicity study; the overall NOEL was 13 ppm (2 mg/kg/day) in mice.

MUTAGENICITY DATA

The following data pertains to studies conducted with technical material, 85% active ingredient:

Ames mutagenicity: Negative

Bacterial DNA damage (rec-assay): Negative

Mouse Lymphoma Point Mutation: Negative

In vitro cytogenetic assay (Chinese hamster lung fibroblasts): Negative

In vivo cytogenetic assay (rat): Negative

In vivo cytogenetic assay (mouse): Negative

Rat Hepatocyte Unscheduled DNA Synthesis: Negative

Mouse Host Mediated Bacterial Gene Mutation Test: Negative

REPRODUCTIVE/TERATOLOGY DATA

The following data pertains to studies conducted with the technical material 85% active ingredient:

Decreased parental body weight and feed consumption; liver, adrenal and thyroid hypertrophy and decreased body weight in offspring at 1500 ppm were observed in the rat reproductive toxicity study. The overall NOEL was 200 ppm (10 mg/kg/day) in rats. *

SENSITIZATION DATA

Delayed Contact Hypersensitivity - guinea pig: No allergic response observed.

Other Information

KERB(R) IS A TRADEMARK OF ROHM AND HAAS COMPANY OR ONE OF ITS SUBSIDIARIES OR AFFILIATES.

CONTACT POINT

Contact

TECHNICAL ENQUIRIES: Geelong Plant, Phone: 0352 276 300

GENERAL ENQUIRIES: Phone: 03 9272 4222

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