

# SAFETY DATA SHEET



Emergency Phone: 0800 243 622  
Dow AgroSciences (N Z) Ltd.  
89 Paritutu Road, New Plymouth

Effective Date: 21-Oct-05  
Product Code: 21435

## PRODUCT: KERB\* 500F HERBICIDE

### 1. PRODUCT AND COMPANY IDENTIFICATION:

**PRODUCT:** Kerb\* 500F Herbicide

**RECOMMENDED USES:** Agricultural, horticultural and turf herbicide.

#### COMPANY IDENTIFICATION:

Dow AgroSciences (NZ) Ltd.  
Registration No. 169964  
89 Paritutu Road, New Plymouth

Customer Service Toll Free Number:  
0800 803 939  
(Mon-Fri, 8am–4.30 pm)  
[www.dowagrosciences.co.nz](http://www.dowagrosciences.co.nz)

Emergency Telephone Number:  
0800 CHEMCALL (0800 243 622)  
(24 hours) (EMERGENCIES ONLY)

Transport Emergency Only Dial 111

This SDS may not provide exhaustive guidance for all the HSNO controls assigned to this substance. The ERMA website [www.ermanz.govt.nz](http://www.ermanz.govt.nz) should be consulted for a full list of triggered controls and cited regulations

### 2. HAZARDOUS IDENTIFICATIONS:

#### EMERGENCY OVERVIEW

**Classified as Hazardous.**

**Classified as Dangerous Goods for transport.**

**HSNO Hazard Classification:** 6.1E, 6.7B, 6.9B, 9.1A, 9.2A

#### Risk Phrases:

R40 Limited evidence of a carcinogenic effect.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Safety Phrases:

S2 Keep out of the reach of children.  
S36/37 Wear suitable protective clothing and gloves.  
S61 Avoid release to the environment.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS:

Ingredient	CAS #	Content
Propyzamide	23950-58-5	42.8%
Balance		57.2%

### 4. FIRST AID:

**Consult the National Poisons Information Centre (0800 POISON (0800 764 766) or a doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.**

**EYES:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**SKIN:** Wash off in flowing water or shower, use soap if available. Consult a physician if irritation persists.

**INGESTION:** Do not induce vomiting. Call a physician. The decision of whether to induce vomiting or not should be made by a physician.

**INHALATION:** Remove to fresh air. Consult a physician.

**NOTE TO PHYSICIAN:** Supportive care. Treatment based on judgement of physician in response to symptoms of patient.

### 5. FIRE FIGHTING MEASURES:

**FLASH POINT:** > 100° C

#### FLAMMABLE LIMITS

**LFL:** Not flammable under normal conditions of use.  
**UFL:** Not flammable under normal conditions of use.

**EXTINGUISHING MEDIA:** Water fog or fine spray. Carbon dioxide. Dry chemical powder. Foam.

**FIRE & EXPLOSION HAZARDS:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/ or irritating. Combustion products include: Carbon oxides. Hydrogen chloride. Nitrogen oxides.

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Keep containers cool by spraying with water. Contain runoff to prevent entry into water or drainage systems. Work upwind of any spill. Avoid breathing smoke.

**FIRE-FIGHTING EQUIPMENT:** Wear protective clothing and use self-contained breathing apparatus.

**HAZCHEM:** 2X

### 6. ACCIDENTAL RELEASE MEASURES:

**ACTION TO TAKE FOR SPILLS/LEAKS:** Absorb with material such as sand, sawdust or Zorball. Dike area in case of large spills. Do not use water for cleanup. Report large spills to Dow AgroSciences Emergency Services at 0800 CHEMCALL (0800 243 622).

### 7. HANDLING AND STORAGE:

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

**HANDLING:** Keep out of reach of children. Suspected of causing cancer. Harmful if swallowed. Avoid contact with skin and clothing. After work, remove protective clothing and equipment, wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Clean up spilled material immediately, and wash clothes, equipment and work area after use.

**STORAGE:** Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. This product can be stored in an unheated building. Do not store with food, feedstuffs, fertilizers and seeds. See product label for further handling/storage precautions relative to the end use of this product.

This substance is subject to a requirement for an emergency management plan, secondary containment and signage, whenever it is held in quantities of 100 litres or more, either alone or in aggregate with other hazardous substances. See Hazardous substances Emergency Management and Identification Regulations.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

#### EXPOSURE GUIDELINE(S):

For active ingredient, propyzamide: Dow AgroSciences recommendation is 0.1 mg/m<sup>3</sup>.

No WES TEL or EEL has been set for this product by ERMA

**ENGINEERING CONTROLS:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

#### RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

**RESPIRATORY PROTECTION:** For most conditions, no respiratory protection should be needed. However, when airborne exposure guidelines and/or comfort levels may be exceeded use an approved air-purifying respirator. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

**SKIN PROTECTION:** For brief contact, no precautions other than clean body-covering clothing and chemical resistant gloves should be needed. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material.

For emergency conditions: Use protective clothing impervious to this material. Selection of specific items will depend on operation.

**EYE PROTECTION:** Use safety glasses. Where contact with the liquid is likely, chemical goggles are recommended.

**APPLICATORS AND ALL OTHER HANDLERS:** Refer to the product label for personal protective clothing and equipment.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES:

**BOILING POINT:** > 100°C  
**VAPOUR PRESSURE:** 17 mmHg at 20°C (active ingredient)  
**SOLUBILITY IN WATER:** Dispersible  
**SPECIFIC GRAVITY:** 1.14 to 1.20 g/cm<sup>3</sup>  
**pH:** 8.3-10  
**APPEARANCE:** Tan liquid  
**ODOUR:** Mild  
**pH:** 8.3-10

### 10. STABILITY AND REACTIVITY:

**STABILITY: (CONDITIONS TO AVOID)**  
Stable under normal conditions.

**INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID)**  
None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None under normal conditions of storage and use. Thermal decomposition products include hydrogen chloride.

**HAZARDOUS POLYMERIZATION:** Not known to occur.

### 11. TOXICOLOGICAL INFORMATION:

**POTENTIAL HEALTH EFFECTS:** This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

**EYE:** May cause slight, temporary eye irritation.

**SKIN:** The dermal LD<sub>50</sub> for rats is >2000mg/kg. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Essentially nonirritating to the skin.

**INGESTION:** Low toxicity if swallowed. The oral LD<sub>50</sub> for rats is > 5000 mg/kg.

**INHALATION:** No adverse effects anticipated by this route of exposure incidental to proper handling.

**SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:**  
For the active ingredient, propyzamide, effects have been reported in animals on the following organs: liver, kidney, pituitary, adrenal gland, thyroid, ovaries, and pancreas.

**CANCER INFORMATION:** The active ingredient, propyzamide, has caused cancer in laboratory animals.

**TERATOLOGY (BIRTH DEFECTS):** The active ingredient, propyzamide, did not cause birth defects in laboratory animals and has been toxic to the fetus in laboratory animals only at doses toxic to the mother.

**REPRODUCTIVE EFFECTS:** The active ingredient, propyzamide, has had effects on reproduction in laboratory animal studies only at doses that produced significant toxicity to the parent animals.

**MUTAGENICITY (EFFECTS ON GENETIC MATERIAL):**  
The active ingredient, propyzamide, is not known to be mutagenic.

### 12. ECOLOGICAL INFORMATION:

**ENVIRONMENTAL FATE:** Propyzamide readily degrades in soil and water and is extensively metabolised by plants and animals.

**DEGRADATION AND PERSISTENCE:** The half-life of propyzamide is about 30 days in both soil and water, producing more polar breakdown products until final formation of carbon dioxide. Propyzamide does not leach in soils except those with high clay content where the material is also actively degraded.

**ECOTOXICOLOGY:** The active ingredient, propyzamide, is considered non-toxic to bees and birds and of low toxicity to fish (rainbow trout are the most sensitive species tested; 96-hr LC<sub>50</sub> is 4.7 mg/L) and aquatic invertebrates such as *Daphnia magna* (48 hr LC<sub>50</sub> is >5.6 mg/L). Propyzamide is very toxic to algae and terrestrial plants.

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### 13. DISPOSAL CONSIDERATIONS:

**DISPOSAL METHOD:** If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

### 14. TRANSPORT INFORMATION:

**PUBLIC PASSENGER VEHICLE TRANSPORT:** To be transported ONLY in the sealed original container.  
Maximum volume 10L

#### DANGEROUS GOODS CLASSIFICATION

**UN No:** 3082

**Class:** 9

**Packing group:** III

**SHIPPING NAME:** ENVIRONMENTALLY  
HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(PROPYZAMIDE)

Compliance with the above land, rail, marine and air requirements is deemed to comply with the applicable requirements of the Hazardous substances Identification and Emergency Management Regulations.

### 15. REGULATORY INFORMATION:

**ACVMG APPROVAL NUMBER:** P3843

**ERMA New Zealand Approval Code:** HSR000560

### 16. OTHER INFORMATION:

#### Glossary

**ACGIH:** American Conference of Governmental Industrial Hygienists.

**BCF: Bioconcentration Factor** - a measure for the characterization of the accumulation of a chemical in an organism. It is defined as the concentration of a chemical in an organism (plants, microorganisms, animals) divided by the concentration in a reference compartment (e.g. food, surrounding water).

**EC<sub>50</sub>:** median effective concentration. Statistically derived concentration of a substance in an environmental medium expected to produce a certain effect in 50% of test organisms in a given population under a defined set of conditions.

**EEL:** Environmental exposure standard set by ERMA

**Explosive Limits:** The range of concentrations (% by volume in air) of a flammable gas or vapour that can result in an explosion for ignition in a confined space.

**ERMA:** The Environmental Risk Management Authority of New Zealand.

**K<sub>oc</sub>:** the organic carbon partition coefficient (mL soil water /g organic carbon).

**K<sub>ow</sub>:** See P<sub>ow</sub>

**LC<sub>50</sub>:** Lethal Concentration 50%. A concentration of chemical in air or water that will kill 50% of the test organisms.

**LD<sub>50</sub>:** Lethal Dose-50%. The doses of a chemical that will kill 50% of the test animals receiving it.

**NIOSH:** American national Institute of Occupational Safety and Health, a federal agency which conducts research on occupational safety and health questions and recommends new standards.

**OSH:** Occupational Safety and Health Service of New Zealand.

**OSHA:** American Occupational Safety and Health Administration.

**PEL:** Permissible Exposure Level, a maximum allowable exposure level by law.

**pH:** Measure of how acidic or alkaline a material is using a 1 - 14 scale. pH 1 is strongly acidic and pH 14 strongly alkaline.

**Polymerisation:** a chemical reaction in which small molecules (monomers) combine to form much larger molecules (polymers). A hazardous polymerisation reaction is one that occurs at a fast rate and releases large amounts of energy.

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**P<sub>ow</sub>:** The octanol-water partition coefficient is the ratio of the concentration of a chemical in octanol and in water at equilibrium and at a specified temperature. Octanol is an organic solvent that is used as a surrogate for natural organic matter. This parameter is used in many environmental studies to help determine the fate of chemicals in the environment.

**STEL:** Short-Term Exposure Limit. A term used to indicate the maximum average concentration allowed for a continuous 15 minute exposure period.

**TEL:** Tolerable Exposure Limit set by ERMA

**TVL:** Threshold Limit Value, an exposure limit set by a competent authority

**TWA:** Time Weighted Average. The average concentration of a chemical in air over the total exposure time - usually an 8-hour workday.

**WES:** Work place exposure standard set by ERMA or OSH.

### References

AS/NZS 1715-1994 Selection Use and Maintenance of Respiratory Protective Devices.

ASNZS 1716 - 1994 Respiratory protective devices.

A guide to Respiratory Protection (published by the Occupational Safety and Health Service with support of NZ Safety Ltd 1999

Guidelines for Personal Protection for Agrichemical Users NZ Safety Limited.

Environmental Risk Management Authority Decision for ERMA Approval Code (Refer to Section 15).

Land Transport Rule 45001: Dangerous Goods 1999.

International Maritime Dangerous Goods Code (IMDG)

Maritime Rule 24A Carriage of Cargoes-Dangerous Goods

International Air Transport Association (IATA) Dangerous Goods Regulation

**FOR FURTHER PRODUCT INFORMATION CALL DOW AGROSCIENCES CUSTOMER SERVICE REPRESENTATIVES TOLL FREE 0800 803 939 DURING BUSINESS HOURS.**

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER SHOULD READ THIS MSDS AND CONSIDER THE INFORMATION IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE INCLUDING IN CONJUNCTION WITH OTHER PRODUCTS. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY. THE RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.