

Material Safety Data Sheet



Kerb* 50 WSP Selective Herbicide

*Trademark of Dow AgroSciences LLC - Dow AgroSciences Canada Inc. is a licensed user

In case of emergency Call CANUTEC at 613 996 6666

1. Product Identification:**Product name:** Kerb* 50 WSP Selective Herbicide**Product use:** Kerb 50 WSP is used for selective control of many annual and perennial grasses and broad-leaved weeds in fruit, vines and other high-value crops as well as range and pasture**Supplier:**Dow AgroSciences Canada Inc.
Suite 2100, 450 - 1st Street SW,
Calgary, Alberta,
Canada, T2P 5H1**Effective date:** April 14, 2009www.dowagro.ca

This product is regulated under authority of the Pest Control Products Act

2. Composition:

Component	CAS Number	% (w/w)
Pronamide (Propyzamide)	023950-58-5	51.0
Other ingredients	not available	49.0
Including:		
Kaolinite	001332-58-7	
Crystalline silica ¹	014808-60-7	>0.1 ²
Titanium Dioxide	013463-67-7	≥1.0 ²

¹Contained in kaolinite²As a component of entire formulation

Note: The above ingredients are those contained in the formulation and do not reflect the components of the water-soluble packaging, which are considered to be non-hazardous, according to OSHA definition.

3. Hazard Identification:**Emergency Overview:**

This product is an off-white odorless powder contained in water-soluble pouches. Direct contact with contained material may cause eye and skin irritation.

Potential Health Effects:

Eyes: Direct contact may cause slight temporary eye irritation. Corneal injury is unlikely. Dust may irritate eyes.

Skin contact: Brief contact is essentially non-irritating to skin. Prolonged contact may cause slight skin irritation with local redness.

Skin absorption: Prolonged contact is not likely to result in this material being absorbed in harmful amounts.

Ingestion: Harmful effects not anticipated from swallowing small amounts of this product.

Inhalation: Vapors are unlikely due to physical properties. Dust may cause irritation of the upper respiratory tract (nose and throat) and lungs.

Consult a physician 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 at once.

Eyes: Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eyes. Get medical attention if irritation persists.

Skin: Remove contaminated clothing at once. Rinse skin immediately with plenty of water for 15 to 20 minutes. Get medical attention if irritation persists.

Ingestion: No emergency medical treatment is necessary.

Inhalation: Remove individual to fresh air. If person is not breathing, then give artificial respiration; if by mouth-to-mouth use rescuer protection (pocket mask etc). Get medical attention at once.

4. First Aid Measures:

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Have the Material Safety Data Sheet, and if available, the product container or label with you when calling for or going for medical assistance.

Note to physician:

There is no antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting Measures:

Flash point: Not applicable

Flammable limits: Not available

Auto-ignition temperature: Not available

Extinguishing media: Use CO₂, dry chemical, foam or water spray.

Sensitivity to mechanical impact/static

discharge: Not available

Unusual fire and explosion hazards: Pesticide particulates can become airborne. Combustion generates toxic fumes of the following: hydrogen chloride, nitrogen oxides and/or carbon oxides. Dusts at sufficient concentrations can form explosive mixtures with air. The minimum ignition temperature is 525°C for a dust cloud and 150°C for a dust layer. Contain firefighting water for future disposal.

Fire-fighting equipment: Wear positive-pressure self-contained breathing apparatus and full turnout gear.

6. Accidental Release Measures:

Sweep up small spills and place in a suitable container for disposal. Keep dusts to a minimum. Keep spills and cleaning run-off out of municipal sewers and open bodies of water. Report large spills to CANUTEC at 613 996 6666. If workers are exposed to this material during clean-up operations, remove all contaminated clothing and change into fresh clothing as soon as possible. Wash all exposed skin areas with soap and water immediately after exposure.

7. Handling and Storage:

Handling: Packages must be handled carefully to avoid breakage, or be allowed to warm to temperatures greater than 0°C before handling. Avoid creation of high concentrations of dust in air and accumulation of dust on equipment. An airborne dust of this material can create a dust explosion. Keep Kerb 50 WSP out of reach of

children or animals. Practice good care and good safety precautions when handling this product. Avoid breathing dust and spray mist. Do not swallow this product. Contaminated clothing should be washed separately from domestic laundry and line-dried. Once used for contaminated clothing, the washing machine should be operated through a complete cycle with hot water and detergent only, prior for domestic laundry. Avoid contact with eyes, skin and clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or the toilet.

Storage: Store in original containers only, out of direct sunlight in a cool place. Do not store this product at temperatures greater than 50°C for extended periods. Water-soluble packets may become brittle if stored at temperatures less than 0°C. Do not ship or store with drugs, food, feed, seed or clothing.

8. Exposure Controls, Personal Protection and Exposure Limits:

Exposure limits: Pronamide (Propyzamide): Dow AgroSciences Industrial Hygiene Guide is 0.1 mg/m³ TWA.

Crystalline silica (contained in Kaolinite clay): ACGIH TLV is 0.1 mg/m³ (respirable) for quartz, Tripoli, and fused silica; 0.05 mg/m³ (respirable) for cristobalite and tridymite. OSHA PEL for respirable dust is 10% of the silica dioxide present in the formulation plus 2 mg/m³ (respirable) for quartz, Tripoli, and for fused silica; For quartz, cristobalite and for tridymite, OSHA PEL is ½ the value calculated from the respirable dust formula for quartz, cristobalite and tridymite.

Titanium Dioxide: ACGIH TLV is 10 mg/m³ TWA, A4. OSHA PEL is 15 mg/m³, Total Dust.

Engineering controls: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Breathing: Atmospheric levels should be maintained below the exposure guidelines. If respiratory irritation is experienced, use an approved air-purifying respirator.

Protective clothing: For brief contact during manufacture, warehousing and transport, wear clean body-covering clothing. Applicators and other field handlers, including persons repairing

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or cleaning application equipment, must wear clean body-covering clothing, impervious gloves and boots. In addition, persons making and/or transferring field dilutions of this product must wear an impervious apron.

Eyes: Use safety glasses. If there is a potential for exposure to particles, which could cause eye discomfort, wear chemical workers' goggles.

Other protection: None stated

9. Physical and Chemical Properties:

Boiling point: Not applicable

Vapor pressure: Not available

Volatility: Not available

pH: Not applicable

Appearance: Off-white solid

Odor: None

Coefficient of water/oil distribution: Not available

Bulk density: Not available

Evaporation rate: Not applicable

Solubility in water: Disperses in water

Viscosity: Not applicable

Odor threshold: Not available

Melting point: Not available

10. Stability and Reactivity:

Stability: This product is stable under normal storage conditions. Do not heat to temperatures greater than 150°C.

Incompatibility: None known

Hazardous decomposition products: Thermal decomposition may yield hydrogen chloride.

Hazardous polymerization: Does not occur

11. Toxicological Information:

Skin absorption: Acute dermal LD50 (rat) is >2000 mg/kg and (rabbit): >10000 mg/kg

Ingestion: Acute oral LD50 (rat) is >5000 mg/kg

Inhalation: The maximum practically attainable concentration of this product in the tests (5.00 mg/L for four hours) produced no ill effects in test animals.

Sensitization: This product did not cause allergic skin reactions when tested in guinea pig.

Chronic effects: For prodamide, in animals, effects have been reported on the liver, kidney, pituitary, adrenals, thyroid, ovaries, and pancreas. For crystalline silica, in animals, effects have been reported on the central nervous system, kidney and liver. Repeated

excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs.

Cancer: Pronamide has caused cancer in laboratory animals. Crystalline silica has been shown to cause cancer in laboratory animals and humans.

Birth defects: Pronamide has been toxic to the fetus in laboratory animals only at doses toxic to the mother. Prodamide did not cause birth defects in laboratory animals.

Reproductive effects: For pronamide, in laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Mutagenicity: For pronamide, *in-vitro* and animal genetic toxicity studies were negative. For crystalline silica, *in-vitro* genetic toxicity studies were negative in some cases and positive in other cases.

12. Ecological Information:

Pronamide is non-toxic to bees and is practically non-toxic to birds. Pronamide is moderately toxic to aquatic organisms on an acute basis.

Degradation and Metabolism:

Soil/Environment: Half-life in soil for propyzamide is 30 days at 25°C. Duration of residual activity in soil following an application rate of 1 to 4 kg/ha ranges from two to six months.

Plants For metabolism in plants, see R. Y. Yih *et al.*, *J. Agric. Food Chem.*, 1971, **19**, 314-324; J. D. Fisher, *ibid.*, 1974, **22**, 606-608; J. M. Cantier *et al.*, *Pestic. Sci.*, 1986, **17**, 235.

Animals: As for plants

13. Disposal Considerations:

Unused unwanted product: Contact Dow AgroSciences or your provincial regulatory agency for disposal information.

Container disposal: Refer to the product label for instructions regarding cleaning and disposal of empty pesticide containers. If these instructions are missing or not understood, contact Dow AgroSciences at 800 667 3852 or your provincial regulatory agency for direction.

14. Transport Information:

Material Safety Data Sheet

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This product is classified as "**Not Regulated**" under regulations of the Transportation of Dangerous Goods Act.

15. Regulatory Information:

Pest Control Products Act registration number: 25595

For information phone: 800 667 3852

MSDS status: Revised sections:

1. Product Identification

Date of last revision: April 12, 2006

16. Other Information:

National Fire Code classification: Non applicable

NFPA ratings: Health: 1; Flammability: 0; Reactivity: 0.

Notice: The information contained in this Material Safety Data Sheet ("MSDS") is current as of the effective date shown in Section 1 of this MSDS and may be subject to amendment by Dow AgroSciences Canada Inc. ("DASCI") at any time. DASCI accepts no liability whatsoever that results in any way from the use of MSDS that are not published by DASCI, or have been amended without DASCI express written authorization. Users of this MSDS must satisfy themselves that they have the most recent and authorized version of this MSDS and shall bear all responsibility and liability with respect thereto. Any conflict or inconsistencies as to the contents of this MSDS shall be resolved in favor of DASCI by the most recent version of the MSDS published by DASCI.