

Section 1 - Identification of Chemical Product and Company

Statement of Hazardous Nature

This product is classified as: Hazardous according to the criteria of NOHSC Australia.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Emergency Response: 1800 033 111	Phone: (03)5223 3746
Sipcam Pacific Australia Pty Ltd	Fax (03)5223 3756
Suite 11/23-31 Gheringhap St	ACN 073 176 888
Geelong, Victoria, 3220 AUSTRALIA	

Substance:	Active ingredient is an amide derivative.
Trade Name:	Burst Herbicide
Product Use:	Agricultural herbicide for use as described on the product label.
Creation Date:	September, 2002
Revision Date:	September, 2002

Section 2 – Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
Propyzamide	23950-58-5		not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 3 - Hazards Identification

Risk Phrases: R36/38. Irritating to eyes and skin.

Safety Phrases: S24/25. Avoid contact with skin and eyes.

SUSDP Classification: S5

ADG Classification: None allocated. Not a Dangerous Good.

UN Number: None allocated

Emergency Overview

Physical Description & colour: White to off-white powdered solid. Presented in water-soluble measure packs.

Odour: No odour.

Major Health Hazards: Propyzamide is practically nontoxic via ingestion. The reported oral LD₅₀ values for Propyzamide range from 5620 mg/kg in female rats to 8350 mg/kg in male rats, respectively, and 10,000 mg/kg in dogs. Propyzamide is slightly toxic by skin exposure, with a dermal LD₅₀ of greater than 3160 mg/kg. When applied to the skin of rabbits, it produced slight local irritation, but no systemic intoxication. The 4-hour inhalation LC₅₀ for Propyzamide is greater than 5.0 mg/L, indicating slight toxicity by this route. No major health hazards are known.

Potential Health Effects

See section 11 for Chronic exposure studies.

Inhalation

Short term exposure: Available data indicates that this product is not harmful. However product is unlikely to cause any discomfort or irritation.

Skin Contact:

Short term exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.

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Eye Contact:

Short term exposure: Available data shows that this product is not harmful. However product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

Ingestion:

Short term exposure: Available data shows that this product is not harmful. This product is unlikely to cause any irritation problems in the short or long term.

Carcinogen Status:

NOHSC: No significant ingredient is classified as carcinogenic by NOHSC.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia and is available at all times. Have this MSDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Quickly and gently, blot or brush away excess chemical. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 20 minutes or until chemical is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts). If irritation persists, repeat flushing and obtain medical advice. Completely decontaminate clothing, shoes and leather goods before reuse or discard.

Eye Contact: Quickly and gently blot or brush away product. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water until the product is removed or until a few minutes after irritation has ceased, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face.

Ingestion: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Section 5 – Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. This product, if scattered, may form flammable or explosive dust clouds in air.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.

Fire Fighting: When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus. Do not scatter spilled material with high pressure water jets.

Flash point: Not flammable.

Upper Flammability Limit: No data.

Lower Flammability Limit: No data.

Autoignition temperature: No data.

Flammability Class: No data.

Section 6 – Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 – Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed.

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and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.

Polymerisation: This product is unlikely to undergo polymerisation processes.

Section 11 – Toxicological Information

Toxicity: Acute toxicity: Propyzamide is practically nontoxic via ingestion. The reported oral LD₅₀ values for Propyzamide range from 5620 mg/kg in female rats to 8350 mg/kg in male rats, respectively, and 10,000 mg/kg in dogs. Propyzamide is slightly toxic by skin exposure, with a dermal LD₅₀ of greater than 3160 mg/kg. When applied to the skin of rabbits, it produced slight local irritation, but no systemic intoxication. The 4-hour inhalation LC₅₀ for Propyzamide is greater than 5.0 mg/L, indicating slight toxicity by this route.

Chronic toxicity: When dogs were fed a diet containing Propyzamide for 3 months, decreases in weight gain and food consumption, changes in blood chemistry, and increased liver weights were observed at doses of 15 mg/kg/day. In a study in rats over 3 months, similar effects were seen at doses of over 10 mg/kg/day, and changes in thyroid, adrenal, and pituitary function were observed at 50 mg/kg/day. In a 2-year feeding study in dogs, the addition of Propyzamide to the diet at doses of 0.75, 2.5, or 7.5 mg/kg/day caused no adverse health effects at any of the doses tested.

Reproductive effects: When pregnant rabbits were given doses of 5, 20, or 80 mg/kg/day during days 7 to 19 of gestation (18 rabbits per dose), no effects on development or reproduction were observed at or below the 20 mg/kg dose. At 80 mg/kg, there was an increased incidence of liver lesions, one maternal death, five abortions, and a decrease in maternal and offspring weight gain. In a three-generation rat reproduction study, no effects on reproduction were observed at 300 ppm (15 mg/kg/day), the highest dose tested. It is unlikely that Propyzamide will have reproductive effects except at doses high enough to cause maternal toxicity.

Teratogenic effects: No teratogenic effects were found when doses as high as 15 mg/kg/day were administered to pregnant rabbits. This evidence suggests Propyzamide is not teratogenic.

Mutagenic effects: Mutagenicity tests on bacteria, mammalian cell cultures, and live animals have been negative. It appears Propyzamide is not mutagenic.

Carcinogenic effects: Propyzamide caused liver tumors in mice after 2 years at doses of 10 mg/kg/day and above. In rats, doses of 50 mg/kg/day and above produced changes in ovary and liver structure and function, as well as thyroid and testicular effects. These data suggest that Propyzamide may have carcinogenic activity at sufficient doses.

Organ toxicity: Target organs identified in animal studies include the liver, thyroid, and adrenal and pituitary glands.

Fate in humans and animals: Propyzamide is not readily absorbed into the bloodstream from the gastrointestinal tracts of rats and cows. After oral doses of a formulated product to rats, 54% and 0.6% of the unmetabolized Propyzamide was recovered in feces and urine, respectively. Unmetabolized Propyzamide did not appear in the urine of a cow treated orally with the formulated product. Traces of Propyzamide were found in the milk of cows given feed that contained 5 ppm doses of a Propyzamide formulation. Propyzamide has a low potential for bioaccumulation in animal tissues.

Section 12 – Ecological Information

Effects on birds: Propyzamide is practically nontoxic to birds. The oral LD₅₀ for Propyzamide in Japanese quail is 8700 mg/kg, and greater than 14,000 mg/kg in mallard ducks. The 8-day dietary LC₅₀ for a formulated product in bobwhite quail and mallard ducks is greater than 10,000 ppm.

Effects on aquatic organisms: Propyzamide is practically nontoxic to warm water fish and slightly toxic to cold water fish. The 96-hour LC₅₀ for Propyzamide is 100 mg/L in bluegill sunfish, 72 mg/L in rainbow trout, 350 mg/L in goldfish, 204 mg/L in harlequin fish, and 150 mg/L in guppies. The 48-hour LC₅₀ for *Daphnia magna*, a small freshwater crustacean, is greater than 5.6 mg/L. Propyzamide may be moderately toxic to aquatic invertebrates.

Effects on other organisms: Propyzamide is nontoxic to honey bees.

Environmental Fate:

Breakdown in soil and groundwater: Propyzamide is moderately persistent in most soils, with a reported average field half-life of 60 days. It is readily bound, or adsorbed, to most soils. Increasing soil temperature, and to a lesser extent, soil moisture and pH increase the rate of Propyzamide degradation in soil. In most soil types, there is very little movement, or leaching, of Propyzamide into groundwater as it is nearly insoluble in water. Leaching of Propyzamide residues in soil is most likely in soils with low organic matter content, such as loamy sands or silt loams. Propyzamide is inactivated by soil organic matter and will not be effective on muck, peat, or other very high-organic content soils. Depending upon soil type and climatic conditions, persistence of Propyzamide may be higher. Accumulation of the herbicide from repeated annual applications to the same soil does not appear problematic. Chemical degradation may be the main route of disappearance from the soil. Photodecomposition at the soil surface can also occur. A moderate amount of Propyzamide breakdown is carried out by soil microorganisms. The herbicide is not active against common soil microorganisms. Volatilization loss may be high under hot, dry conditions.

Breakdown in water: In water bodies, Propyzamide is stable at a neutral pH. It is slowly degraded chemically, by light, and by aquatic and microorganisms. Loss from volatilization is not significant. Propyzamide is thought to be stable because less than 10% was hydrolyzed, or broken down in water, over a 4-week period. It is stable to hydrolysis between pH 4.7 and 8.8.

Breakdown in vegetation: Propyzamide is readily translocated from the roots to other plant parts. Absorption of Propyzamide through plant leaves is minimal. Propyzamide is metabolized slowly by both tolerant and sensitive plants.

Section 13 – Disposal Considerations

Disposal: Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.

Section 14 – Transport Information

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Section 15 – Regulatory Information

AICS: We are unable to verify the presence of all of the ingredients in this product on the public AICS database. There are several possible reasons why this may occur. If you have any reason to be concerned about this, we suggest you call us on the number below.

Section 16 – Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
CAS number	Chemical Abstracts Service Registry Number
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOHSC	National Occupational Health and Safety Commission
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number

Contact Points:

AUSTRALIA

Police and Fire Brigade:	Dial	000
If ineffective:	Dial	1100 (Exchange)
For emergency response:	Dial	1800 033 111
National Poisons Information Centre:	Dial	13 1126 (from anywhere in Australia)

Please read all labels carefully before using product.

This MSDS 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.

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<http://www.kilford.com.au> Phone (02)9516 2079

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