

## Section 1 - Identification of The Material and Supplier

FMC Australasia Pty Ltd  
12 Julius Ave  
North Ryde, NSW 2113

Emergency: 1800 033 111 (24 hours - Australia wide)  
Freecall 1800 624 597 (business hours)  
www.fmccrop.com.au

**Chemical nature:** Propyzamide is an amide derived herbicide  
**Trade Name:** Rustler 900 WG Herbicide  
**APVMA Code:** 69519  
**Product Use:** Agricultural herbicide for use as described on the product label.  
**Creation Date:** July, 2016  
**This version issued:** June 2019 and is valid for 5 years from this date.  
**Poisons Information Centre: Phone 13 1126 from anywhere in Australia**

## Section 2 - Hazards Identification

### Statement of Hazardous Nature

This product is classified as: Xi, Irritating. N, Dangerous to the environment. Hazardous according to the criteria of SWA.

Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

**SUSMP Classification:** S5

**ADG Classification:** None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

**UN Number:** None allocated



### GHS Signal word: WARNING

Skin irritation Category 2  
Eye irritation Category 2B  
Specific Target Organ Toxicity - Single Exposure Category 3  
Carcinogenicity Category 2  
Hazardous to aquatic environment Short term/Acute Category 2

#### HAZARD STATEMENT:

H315: Causes skin irritation.  
H320: Causes eye irritation.  
H335: May cause respiratory irritation.  
H351: Suspected of causing cancer.  
H401: Toxic to aquatic life.

#### PREVENTION

P102: Keep out of reach of children.  
P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P262: Do not get in eyes, on skin, or on clothing.  
P264: Wash contacted areas thoroughly after handling.  
P273: Avoid release to the environment.  
P281: Use personal protective equipment as required.  
P235+P410: Keep cool. Protect from sunlight.

#### RESPONSE

P305: If in eyes: hold eyelids apart and flush the eye continuously with running water for 10 minutes.  
P340: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P362: Take off contaminated clothing and wash before reuse.  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P302+P352: IF ON SKIN: Wash with plenty of soap and water.

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P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical advice.

P337+P313: If eye irritation persists: Get medical advice.

P391: Collect spillage.

P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog.

#### STORAGE

P402+P404: Store in a dry place. Store in a closed container.

P410+P403: Protect from sunlight. Store in a well-ventilated place.

#### DISPOSAL

P501: Dispose of contents and containers as specified on the registered label.

### Emergency Overview

**Physical Description & Colour:** White to off-white granules

**Odour:** No odour.

**Major Health Hazards:** Propyzamide is practically non-toxic via ingestion. The reported oral LD<sub>50</sub> 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 LD<sub>50</sub> 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 LC<sub>50</sub> for Propyzamide is greater than 5.0 mg/L, indicating slight toxicity by this route. limited evidence of a carcinogenic effect, irritating to eyes and skin.

### Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Propyzamide	23950-58-5	900 g/kg	not set	not set
Other ingredients said to be non hazardous	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 SWA 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 may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated 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 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 (0800 764 766 in New Zealand) and is available at all times. Have this SDS 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:** Gently brush away excess particles. Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact:** Quickly and gently brush particles from eyes. No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

### Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

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

**Extinguishing Media:** In case of fire, use carbon dioxide, dry chemical, foam, water fog.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

**Flash point:** Combustible solid.

**Upper Flammability Limit:** No data.

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**Lower Flammability Limit:** No data.  
**Autoignition temperature:** No data.  
**Flammability Class:** Combustible solid.

## Section 6 - Accidental Release Measures

**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. No special protective clothing is normally necessary because of this product. However it is good practice to wear overalls, goggles and gloves when handling chemicals. Suitable materials for protective clothing include no specific manufacturer recommendations. Use impermeable gloves with care. Eye/face protective equipment should comprise as a minimum, protective glasses and, preferably, goggles. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that dusts are likely to build up in cleanup area, we recommend that you use a suitable dust mask.

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. Consider vacuuming if appropriate. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. 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 SDS 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 SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Check packaging - there may be further storage instructions on the label.

## Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

<b>SWA Exposure Limits</b>	<b>TWA (mg/m<sup>3</sup>)</b>	<b>STEL (mg/m<sup>3</sup>)</b>
Exposure limits have not been established by SWA for any of the significant ingredients in this product.		

The ADI for Propyzamide is set at 0.02mg/kg/day. The corresponding NOEL is set at 1.9mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, June 2014.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

**Eye Protection:** Eye protection is not normally necessary when this product is being used. However, if in doubt, wear suitable protective glasses or goggles.

**Skin Protection:** The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

**Protective Material Types:** There is no specific recommendation for any particular protective material type.

**Respirator:** If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable dust mask.

Eyebaths or eyewash stations and safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

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## Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	White to off-white granules
<b>Odour:</b>	No odour.
<b>Boiling Point:</b>	Not applicable.
<b>Freezing/Melting Point:</b>	Active ingredient melts at 155 - 158°C
<b>Volatiles:</b>	No data.
<b>Vapour Pressure:</b>	Negligible at ambient temperatures
<b>Vapour Density:</b>	Not applicable.
<b>Specific Gravity:</b>	No data.
<b>Water Solubility:</b>	Dispersible.
<b>pH:</b>	No data.
<b>Volatility:</b>	No data.
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	Not applicable.
<b>Coeff Oil/water Distribution:</b>	No data
<b>Viscosity:</b>	Not applicable.
<b>Autoignition temp:</b>	No data.

## Section 10 - Stability and Reactivity

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** strong acids, strong bases, strong oxidising agents.

**Fire Decomposition:** Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

**Polymerisation:** This product will not undergo polymerisation reactions.

## Section 11 - Toxicological Information

**Toxicity: Acute toxicity:** Propyzamide is practically non-toxic via ingestion. The reported oral LD<sub>50</sub> 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 LD<sub>50</sub> 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 LC<sub>50</sub> 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.

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**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 faeces 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.

There is no data to hand indicating any particular target organs.

### Classification of Hazardous Ingredients

Ingredient	Risk Phrases
Propyzamide	No risk phrases at concentrations found in this product
<ul style="list-style-type: none"><li>• Carcinogenicity - category 2</li><li>• Hazardous to the aquatic environment (acute) - category 1</li><li>• Hazardous to the aquatic environment (chronic) - category 1</li></ul>	
<b>Propyzamide:</b> LD <sub>50</sub> Oral, Rat 5,620 mg/kg	LD <sub>50</sub> Oral, Dog = 10,000mg/kg
LD <sub>50</sub> Dermal, Rabbit = >3,160mg/kg	LC <sub>50</sub> Inhalation, Rat = 5.0mg/L/4hr

### Potential Health Effects

#### Inhalation:

**Short Term Exposure:** Significant inhalation exposure is considered to be unlikely. Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term inhalation.

#### Skin Contact:

**Short Term Exposure:** Significant dermal exposure is considered to be unlikely. Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be mildly irritating, but is unlikely to cause anything more than mild discomfort which should disappear once contact ceases.

**Long Term Exposure:** No data for health effects associated with long term skin exposure.

#### Eye Contact:

**Short Term Exposure:** Exposure via eyes is considered to be unlikely. This product may be mildly irritating to eyes, but is unlikely to cause anything more than mild discomfort which should disappear once product is removed.

**Long Term Exposure:** No data for health effects associated with long term eye exposure.

#### Ingestion:

**Short Term Exposure:** Significant oral exposure is considered to be unlikely. However, this product may be mildly irritating to mucous membranes but is unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term ingestion.

#### Carcinogen Status:

**SWA:** Propyzamide is classified by SWA as a Class 3 Carcinogen, possibly carcinogenic to humans.

See the SWA website for further details. A web address has not been provided as addresses frequently change.

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

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

### Section 12 - Ecological Information

This product is toxic to aquatic organisms. This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

**Effects on birds:** Propyzamide is practically non-toxic to birds. The oral LD<sub>50</sub> for Propyzamide in Japanese quail is 8700 mg/kg, and greater than 14,000 mg/kg in mallard ducks. The 8-day dietary LC<sub>50</sub> for Kerb Technical Herbicide in bobwhite quail and mallard ducks is greater than 10,000 ppm.

**Effects on aquatic organisms:** Propyzamide is practically non-toxic to warm water fish and slightly toxic to cold water fish. The 96-hour LC<sub>50</sub> 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 LC<sub>50</sub> 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 non-toxic to honey bees.

**Environmental Fate:**

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**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:** Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

### Section 14 - Transport Information

**UN Number:** This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

### Section 15 - Regulatory Information

**AICS:** All of the significant ingredients in this formulation are compliant with NICNAS regulations. The following ingredient: Propyzamide, is mentioned in the SUSMP.

### Section 16 - Other Information

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

#### Acronyms:

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 <sup>th</sup> edition)
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>SWA</b>	Safe Work Australia, formerly ASCC and NOHSC
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons
<b>UN Number</b>	United Nations Number

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 MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR 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.

Please read all labels carefully before using product.

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This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (December 2011)

**SAFETY DATA SHEET**