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MATERIAL SAFETY DATA SHEET

Rygel Atrazine 900 DF Herbicide

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Supplier: Profeng Australia Pty Ltdn
ACN: 156 055 533
Street Address: 103 Ordish Road, Dandenong South, Vic 3175
Telephone: (03) 9768 2803
Facsimile: (03) 9768 2804

Emergency telephone number: National Poisons Information Centre:
Phone Australia 13 11 26.

Product Name: Rygel Atrazine 900 DF Herbicide
Product Use: For control of weeds and grasses in sorghum, maize, sugar cane, TT canola, lucerne and for fallow area maintenance.

2. HAZARDS IDENTIFICATION

May cause sensitisation by skin contact.
Harmful: Danger of serious damage to health by prolonged exposure if swallowed.
Other Information Poisons Schedule S5
Global Harmonization System (GHS) classification:
Sensitization – Skin: Category 1, 1A, 1B.
Specific Target Organ Toxicity (Repeated Exposure): Category 2.
Hazardous to the Aquatic Environment – Acute Hazard: Category 1.
Hazardous to the Aquatic Environment – Long-Term Hazard: Category 4.

Pictogram:

Signal word Danger

Hazard statement(s)

H317	May cause an allergic skin reaction
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.

Precautionary statement(s)

P261	Avoid breathing dust, mist or spray
P272	Contaminated work clothing should not be allowed out of the workplace
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P501	Dispose of contents and containers as specified on the registered label

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterization Solid

Chemical Entity	CAS No	Concentration
Atrazine	1912-24-9	900 g/kg
Talc	14807-96-6	18 g/kg
Dispersants		<10%

This is a commercial product whose exact ratio of components may vary.

4. FIRST AID MEASURES

Inhalation Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.

Ingestion If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

Skin Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

Eye If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.

Seek medical advice if irritation develops or persists.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Water fog, foam, carbon dioxide or dry chemical. Avoid strong water jets - airborne dusts may form a flammable dust cloud.

Combustion Products

If involved in a fire, it will emit toxic fumes of cyanides, hydrogen chloride and possibly carbon oxides.

Combustible solid.

Protective Equipment Breathable air apparatus may have to be worn in confined spaces.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal

Recover the product by sweeping up or vacuuming without raising dust. Collect spilled material and waste in sealable open-top type containers for disposal.

Personal Protection

For appropriate personal protective equipment (PPE), refer Section 8.

Environmental Precautions

Prevent from entering drains, waterways or sewers.

7. HANDLING AND STORAGE

Handling Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers. If dusts are generated, it is advisable to wear a dust mask, refer Section 8.

Storage Store in the closed, original container in a dry, well ventilated area out of direct sunlight. Store in a locked enclosure. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

Other Information Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

NOHSC has set the following exposure standard for atrazine: TLV (TWA) 5 mg/m3, STEL -.
NOHSC has set the following exposure standard for talc: TLV (TWA) 2.5 mg/m3, STEL -.

Respiratory Protection If dusts are present, wear a class P1 dust mask.

Personal Protective Equipment

When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles.

Engineering Controls

Handle in well ventilated areas, generally natural ventilation is adequate.

Hygiene Measures

After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White granule
Odour	Odourless
Melting Point	169 - 176°C for atrazine

Solubility in Water	Disperses in water
Specific Gravity (H2O=1)	Bulk Density 0.90
Vapour Pressure	3.85 x 10-2 mPa @ 25°C for atrazine
Volatile Component	<1%
Partition co-efficient, n-octanol/water	Kow Log P is 2.5 for atrazine
Flammability	Combustible

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Hazardous Polymerisation

Hazardous polymerisation is not possible.

Hazardous Reaction

Keep away from strong oxidising agents, may react violently.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No harmful effects are expected if the precautions on the label and this MSDS are followed.

Inhalation Respiratory protection while spraying is recommended. Some temporary irritation may be experienced.

Ingestion Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.

Skin May irritate the skin. May cause sensitisation by prolonged skin contact.

Eye May irritate the eyes.

Reproductive Toxicity

Data indicates no reproductive effects. Data indicates no teratogenic effects.

Mutagenicity

Data indicates no mutagenic effects.

Carcinogenicity

Atrazine technical has been extensively tested on laboratory mammals and in test-tube systems. After long-term administration (close to two years of continuous feeding) a slight increase in the incidence of mammary tumours was reported in one species (rat), one sex (female) and one strain (Sprague-Dawley) in one study at higher doses.

A more recent study (1992) using Sprague-Dawley rats showed no significant difference between rats fed normal diet and those fed on a diet containing atrazine with regard to the incidence of tumours. Recent studies with the Fischer rat strain have shown no evidence of tumour producing potential. The relevance of the mammary tumour finding to humans is doubted as epidemiological studies of workers involved in the production of atrazine for up

to 30 years have shown no evidence of health problems associated with atrazine exposure. Atrazine has been listed by IARC as a Class 3, not classifiable as to carcinogenicity to humans.

Acute Toxicity – Oral

LD50 (rat) 1869 - 3090 mg/kg for atrazine

LD50 (mice) 1332 - 3992 mg/kg for atrazine

Acute Toxicity - Dermal

LD50 (rat) >3100 mg/kg for atrazine

Acute Toxicity - Inhalation

LC50 (rat) (4hr) >5.8 mg/L for atrazine

Eye Irritation Not an eye irritant.

Skin Irritation Mild skin irritant.

Skin Sensitisation Prolonged and repeated skin contact may result in skin sensitisation.

Other Information The Australian Acceptable Daily Intake (ADI) for atrazine for a human is 0.005 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.5 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, June 2005).

12. ECOLOGICAL INFORMATION

Precautions Do not contaminate dams, waterways or sewers with this product or the containers, which have held this product.

Persistence / Degradability

Average field half-life of atrazine is 35 - 50 days.

This may be longer under cold or dry conditions.

Acute Toxicity - Fish The following is data for the active ingredient, atrazine.

LC50 (96 hr) for rainbow trout is 4.5 - 11.0 mg/L.

LC50 (96 hr) for bluegill sunfish is 16 mg/L.

LC50 (96 hr) for carp is 76 mg/L.

Acute Toxicity - Daphnia

LC50 (48 hr) for daphnia is 6.9 mg/L for atrazine.

Acute Toxicity – Other Organisms

The following data is for the active ingredient, atrazine.

Birds: Not toxic to birds. LD50 for mallard ducks is >2000 mg/kg

LD50 for bobwhite quail is 940 mg/kg

Bees: Not toxic to bees. LD50 >97 µg/bee.

13. DISPOSAL CONSIDERATIONS

Product Disposal On site disposal of the concentrated product is not acceptable. Ideally,

the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemCollect).

Container Disposal Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

It is good practice to separate this product from food, food related materials, animal feedstuffs, seed or fertilisers during transport.

U.N. Number	None Allocated
Proper Shipping Name	None Allocated
DG Class	None Allocated
Hazchem Code	None Allocated
Packing Group	None Allocated

Storage and Transport Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

16. OTHER INFORMATION

All information contained in this document is as accurate as possible based on information submitted by raw material suppliers. **Profeng Australia Pty Ltd** will not be responsible for any damages that may result from reliance on the information contained herein.