

# MATERIAL SAFETY DATA SHEET

## Rygel MCPA 500 Selective Herbicide

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

**Supplier:** Profeng Australia Pty Ltd  
**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 MCPA 500 Selective Herbicide  
**Product Type:** Group I Herbicide  
**Formulation type:** Soluble liquid  
**Chemical type:** Aryloxyalkanoic acid

**Product Use:** For selective control of broadleaf weeds in cereals, linseed, pastures, sugarcane and turf as per Directions for Use table

### 2. HAZARDS IDENTIFICATION

#### Statement of Hazardous Nature

This product is classified as: Xn, Harmful. Xi, Irritating. Hazardous according to the criteria of SWA. Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

**Risk Phrases:** R22, R36/38. Harmful if swallowed. Irritating to eyes and skin.

**Safety Phrases:** S20, S23, S36, S46, S24/25. When using, do not eat or drink. Do not breathe spray mists. Wear suitable protective clothing. If swallowed, contact a doctor or Poisons Information Centre immediately and show this SDS or label. Avoid contact with skin and eyes.

**SUSMP Classification:** S6

**ADG Classification:** None allocated. Not a Dangerous Good under the ADG Code.

**UN Number:** None allocated

**Pictogram:**





|                                   |   |
|-----------------------------------|---|
| <b>Signal word</b>                | Warning   |
| <b>Hazard statement(s)</b>        |   |
| H315                              | Causes skin irritation  |
| H320                              | Causes eye irritation   |
| <b>Precautionary statement(s)</b> |   |
| P264                              | Wash contacted areas thoroughly after handling.                       |
| P370+P378                         | Not combustible. Use extinguishing media suited to burning materials. |
| P501                              | Dispose of contents/ container to an approved waste disposal plant    |

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

| <b>Chemical Entity</b>                       | <b>CAS No</b> | <b>Proportion</b> |
|--|---------------|-------------------|
| MCPA (present as the dimethylamine salt)     | 94-74-6       | 500 g/L           |
| Other ingredients (considered non-hazardous) |               | Balance           |

**4. FIRST AID MEASURES**

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

**Ingestion** Rinse mouth and then drink plenty of water. Do not give anything by mouth to a semi-conscious or unconscious person. 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 immediately.

**First Aid Facilities** If poisoning occurs, contact a doctor or Poisons Information Centre on 13 11 26 (Australia).

**Advice to Doctor** Treat symptomatically.



## **5. FIRE-FIGHTING MEASURES**

**Extinguishing Media** If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.

### **Hazards from Combustion Products**

May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.

### **Special Protective Equipment for fire fighters**

Breathable air apparatus should be worn when fighting a fire in which this product is involved.

**Specific Hazards** Considered low risk due to water content, however upon evaporation of water the product is combustible.

**Hazchem Code** None Allocated

## **6. ACCIDENTAL RELEASE MEASURES**

**Spills & Disposal** Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal. On-site disposal of concentrate is not acceptable.

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

### **Clean-up Methods - Large Spillages**

Place damaged containers in recovery bins (if available) and return to manufacturer. If large liquid spills occur, attempt to recover as much spilt material from sumps and bunded areas before absorbing remaining material into vermiculite or other absorbent.

### **Environmental Precautions**

This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

## **7. HANDLING AND STORAGE**

**Precautions for Safe Handling:** Will irritate the eyes. May irritate the nose and throat. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) elbow-length PVC or nitrile gloves and face shield or goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

**Conditions for Safe Storage:** Do not store the product in galvanised steel or unlined steel containers, as the product may react to produce hydrogen gas, which in turn could form a highly combustible gas that could explode if ignited by an open flame, or spark, lighted cigarette, etc. DO NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in the closed, original container in a cool, well-ventilated area. DO NOT store for



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prolonged periods in direct sunlight. Not classified as a Dangerous Good. This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### National Exposure Standards

No exposure standards have been set for this product or the active ingredients.

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

#### 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 rubber gloves and face shield or goggles.

**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

|  |                                       |
|--|---------------------------------------|
| <b>Form</b>                                | Liquid                                |
| <b>Appearance</b>                          | Clear, red-brown liquid               |
| <b>Odour</b>                               | Ammonia like odour                    |
| <b>Solubility in Water</b>                 | Soluble in water                      |
| <b>Specific Gravity</b>                    | 1.133                                 |
| <b>pH Value</b>                            | 8-9                                   |
| <b>Vapour Pressure</b>                     | Negligible                            |
| <b>Volatile Component</b>                  | 36%                                   |
| <b>Octanol/Water Partition Coefficient</b> | Kow Log P is -0.71 at pH7 (MCPA acid) |
| <b>Flash Point</b>                         | None                                  |
| <b>Flammability</b>                        | Not flammable                         |
| <b>Other Information</b>                   | pKa is 3.07                           |

### 10. STABILITY AND REACTIVITY

**Chemical Stability** Stable under normal conditions.

**Hazardous Polymerization** Hazardous polymerisation is not possible.

#### Incompatible Materials

Reaction of the concentrate or spray mix with acids will precipitate solid MCPA acid and largely de-activate the product and cause blockages in spray equipment. The addition of a strong alkali such as caustic soda will cause release of dimethylamine vapour.

Dimethylamine is moderately toxic, LD<sub>50</sub> (oral, rat) is 700 mg/kg and a TLV of 10



ppm (TWA) has been set.

## 11. TOXICOLOGICAL INFORMATION

### Toxicology Information

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

**Inhalation** The components of the product are of low volatility and no adverse effects are expected from handling the concentrate. A moderate hazard exists from inhalation of spray and care should be taken to avoid inhalation of spray mists.

**Ingestion** Not a likely route of exposure.

Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury. Ingestion of the concentrate in relatively large amounts can result in headache, nausea, lethargy, motor weakness and incoordination.

**Skin** Unless removed immediately, will cause irritation. Prolonged contact with the concentrate may result in absorption of MCPA in harmful amounts.

**Eye** The concentrate will cause severe irritation and possible damage unless washed off immediately.

**Chronic Effects** Liver and kidney damage has been noted in laboratory animals that have been fed excessive doses of MCPA.

**Carcinogenicity** The weight of the evidence is that MCPA is not carcinogenic.

**Acute Toxicity - Oral** The following data is for the active ingredient, MCPA dimethylamine salt.

LD<sub>50</sub> (rat) 1876 mg/kg

**Acute Toxicity - Dermal**

LD<sub>50</sub> (rat) >2000 mg/kg

**Acute Toxicity - Inhalation**

LC<sub>50</sub> (rat) (4hr) >1.69 mg/L

**Eye Irritation** MCPA dimethylamine salt is a severe eye irritant.

**Skin Irritation** The product is a skin irritant.

**Skin Sensitisation** Product is not a skin sensitiser.

**Other Information** The Australian Acceptable Daily Intake (ADI) for MCPA for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1.1 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, September 2005).

## 12. ECOLOGICAL INFORMATION

**Mobility** Rapid degradation in soil prevents significant downward movement under normal conditions.



**Known Harmful Effects on the Environment**

MCPA dimethylamine salt products do not appear to pose any threat to birds.

MCPA dimethylamine salt products do not appear to pose any threat to fish or other aquatic organisms other than in very high concentrations.

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

**Environ. Protection** Spray drift can cause damage, read the label for more information.

**Acute Toxicity – Fish**

LC<sub>50</sub> (96 hr) for rainbow trout is 50 mg/L for MCPA dimethylamine salt

**Acute Toxicity - Daphnia**

EC<sub>50</sub> (48 hr) for daphnia is >190 mg/L for MCPA dimethylamine salt.

**Acute Toxicity - Algae** LC<sub>50</sub> for algae is >392 mg/L.

**Acute Toxicity - Other**

**Organisms**

Birds: Not toxic to birds. LD<sub>50</sub> for bobwhite quail is 270 mg/kg

Bees: Not toxic to bees. LD<sub>50</sub> >200 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**

Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations.

drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMuster symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.

If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority 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.



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**U.N. Number** 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

**Poisons Schedule** S6

**Packaging & Labelling**

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

**Hazard Category** Harmful, Irritant

**AICS (Australia)** All of the components in this product are listed on the Australian Inventory of Chemical Substances.

### 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.