

## Rygel Clopyralid 750 SG Herbicide

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

**Supplier:** Rygel Australia Pty Ltd  
**ACN:** 106 839 007  
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**Email:** [sales@rygel.com.au](mailto:sales@rygel.com.au)

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

**Chemical nature:** Clopyralid is a pyridinecarboxylic acid derivative  
**Product name:** Rygel Clopyralid 750 SG Herbicide  
**Product Use:** A herbicide for the control of a wide range of broadleaf weeds in wheat, barley, oats, triticale, canola, pastures and fallow land.

### 2. HAZARDS IDENTIFICATION

#### Statement of Hazardous Nature

**Not classified as hazardous according to the criteria of NOHSC**

**Not Classified as Dangerous Goods for Land Transport**

**Potential Health Effects:** Slightly irritating to eyes with potential for corneal injury.

#### RISK PHRASES:

None allocated.

#### SAFETY PHRASES:

S25: Avoid contact with eyes. S35: This material and its container must be disposed of in a safe way.

**SUSDP Classification:** S5

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

**UN Number:** None allocated

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS No	Conc.	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Clopyralid, potassium salt	58509-83-4	750 g/kg	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 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.

### 4. FIRST AID MEASURES

**Consult the Poisons Information Centre (131126) or a doctor 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 immediately.**

**Eye:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

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**Skin:** Wash skin with plenty of water.  
**Ingestion:** Call the Poisons Information Centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the Poisons Information Centre or doctor. Never give anything by mouth to an unconscious person.  
**Inhalation:** Move person to fresh air; if effects occur, consult a physician.  
**Note to Physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## 5. FIRE-FIGHTING MEASURES

**Fire & Explosion Hazards:** May produce hydrogen chloride, chlorinated pyridines, oxides of nitrogen and oxides of carbon. Can react violently with aluminium above 110°C when water is present. Avoid contact with aluminium.

**Fire-Fighting Equipment:** Wear positive pressure self-contained breathing apparatus and full protective clothing.

**HAZCHEM:** 2X

**Flash Point:** Not flammable (granule)

**Combustible:** Not combustible

**Upper Flammability Limit:** No data

**Lower Flammability Limit:** No data

## 6. ACCIDENTAL RELEASE MEASURES

**Action to Take for Spills / Leaks:** Do not touch or walk through spilled material. Wear gloves, overall and boots. Stop further spill occurring and prevent entry into waterways and drains.

**Small spills:** In case of spill on floor or paved surfaces sweep up and place in drums for disposal at a licensed local authority landfill. Spill residues may be cleaned using water and detergent. Contain and absorb wash water.

## 7. HANDLING AND STORAGE

**Handling:** Keep out of reach of children. Causes eye irritation. Avoid contact with eyes. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

**Storage:** Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. Do not store with food, feedstuffs, fertilizers and seeds. See product label for further handling/storage precautions relative to the end use of this product. Reduce stacking height where local conditions can affect packaging strength.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**. **ASCC Exposure Limits**    **TWA (mg/m<sup>3</sup>)**    **STEL (mg/m<sup>3</sup>)**  
Exposure limits have not been established by ASCC for any of the significant ingredients in this product.

The ADI for Clopyralid is set at 0.5mg/kg/day. The corresponding NOEL is set at 50mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2006.

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

**Recommendations For Manufacturing, Commercial Blending & Packaging Workers:**

**Eye / Face Protection:** Use chemical goggles. Eye wash fountain should be located in immediate work area.

**Skin Protection:** No precautions other than clean body-covering clothing should be needed. Use gloves chemically resistant to this material.

**Respiratory Protection:** Atmospheric levels should be maintained below the exposure guideline.

When respiratory protection is required for certain operations, use an approved air-purifying respirator.

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In dusty atmospheres, use an approved particulate respirator.

**Applicators & Other Handlers:** Refer to the product label for personal protective clothing and equipment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Description &amp; colour:</b>	Off white granules
<b>Odour:</b>	Odourless
<b>Boiling Point:</b>	No applicable
<b>Flashpoint:</b>	Does not ignite before melting, with decomposition, at 280-290°C
<b>Bulk Density:</b>	0.72 g/mL (loose) 0.79 g/mL (compacted)
<b>Explosive Properties:</b>	Not explosive
<b>Oxidising Properties:</b>	Non-oxidizing
<b>pH, 1% Aqueous dispersion:</b>	6.9
<b>Vapour Pressure:</b>	133 mPa at 24°C (clopyralid acid)

## 10. STABILITY AND REACTIVITY

**Stability:** Decomposes in fire.

**Incompatibility:** (specific materials to avoid) Can react violently with aluminium above 110°C when water is present. Avoid contact with aluminium.

**Hazardous Decomposition Products:** Hydrogen chloride, nitrogen oxides under fire conditions. Chlorinated pyridines.

**Hazardous Polymerisation:** Not known to occur.

## 11. TOXICOLOGICAL INFORMATION

**Potential Health Effects:** This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

**Eye:** May cause slight eye irritation. May cause slight corneal injury.

**Skin:** Essentially non-irritating to skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD<sub>50</sub> for a similar material for skin absorption in rabbits is >2,000 mg/kg. Did not cause allergic skin reactions when tested in guinea pigs.

**Ingestion:** Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. The oral LD<sub>50</sub> for a similar material for rats is >3,500 mg/kg.

**Inhalation:** No adverse effects are anticipated from single exposure to dust.

**Systemic (Other Target Organ) Effects:** For clopyralid, in animals, effects have been reported on the following organs: kidney and liver. Observations in animals include lethargy.

**Cancer Information:** Clopyralid did not cause cancer in laboratory animals.

**Teratology (Birth Defects):** For a similar material, did not cause birth defects or other effects in the foetus even at doses, which caused toxic effects in the mother.

**Reproductive Effects:** For a similar material, in animal studies, has been shown not to interfere with reproduction.

**Mutagenicity:** For a similar material, in-vitro and animal genetic toxicity studies were negative.

## 12. ECOLOGICAL INFORMATION

**Environmental Data:**

**Movement & Partitioning:** Highly mobile in soil. Bio-concentration potential is low (BCF <100 or Log Paw <3).

**Degradation & Persistence:** Moderate to medium persistence in soil. Biodegradation under aerobic laboratory conditions is below detectable limits (BOD<sub>20</sub> or BOD<sub>28</sub>/ThOD <2.5%).

**Ecotoxicity:** Material is practically non-toxic to aquatic organisms on an acute basis (LC<sub>50</sub> or EC<sub>50</sub> is >100 mg/L in most sensitive species). Material is slightly toxic to birds on an acute basis (LC<sub>50</sub> between 501 and 2000 mg/kg). Acute contact LD<sub>50</sub> in honey bee (*Apis mellifera*) is >100 µg/bee. Acute oral LD<sub>50</sub> in honey bee (*Apis mellifera*) is >100 µg/bee. The LC<sub>50</sub> in earthworm (*Eisenia foetida*) is >1000 mg/kg.

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## 13. DISPOSAL CONSIDERATIONS

**Disposal Method:** If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

**Road & Rail Transport:** Not classified as dangerous goods for transport by road and rail by the criteria of the Australian Dangerous Goods Code (ADG 6),

**Marine & Air Transport:** Classified as Dangerous Goods for transport by sea and air according to the criteria of the UN Model Regulations for Transport of Dangerous goods 13th Edition and IMDG code.

**UN No:** 3077

**Class:** 9

**Packing group:** III

**SHIPPING NAME:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOILD, N.O.S  
(CLOPYRALID)

## 15. REGULATORY INFORMATION

**APVMA Approval Number:** 63916

**Poison Schedule:** S5

## 16. OTHER INFORMATION

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

<b>Contact:</b>	Peter Howat	Mobile	0417 921 501
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	Dandenong South, Vic 3175	Fax	03 9768 2804

National Poisons Information Centre: Dial 13 11 26 (from anywhere in Australia).