

# SAFETY DATA SHEET

## Monarch®

Date of Issue: 28 January 2025

### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

**Chemical name of active ingredient(s):** Clopyralid Picloram both as the monoethanolamine salt

**Recommended use:** Herbicide

**Supplier:** UPL New Zealand Limited  
PO Box 51584, Pakuranga  
Auckland  
Phone 0800 100 325  
[www.upl-ltd.com/nz](http://www.upl-ltd.com/nz)

**Emergency telephone number:** 0800 CHEM CALL (0800 243 622) 24 Hours

### 2. HAZARDS IDENTIFICATION

**Hazard Classification:**



#### WARNING

**GHS Classification:**

| GHS Classification and Category   | Hazard Code | Hazard Statement                                 |
|---|-------------|--|
| Serious eye damage/eye irritation Cat. 2  | H319        | Causes serious eye irritation.                   |
| Hazardous to the aquatic environment – Chronic Hazard, Cat 2<br>Hazardous to soil organisms.<br>Hazardous to terrestrial vertebrates. | H411        | Toxic to aquatic life with long lasting effects. |

**Required identification Details:**

#### PRECAUTIONARY STATEMENTS PREVENTION

Any person purchasing, handling or disposing of this product must be suitably qualified

P102 - Keep out of reach of Children.  
P103 - Read label before use.  
P264 - Wash hands and face thoroughly after handling.  
P280 - Wear eye protection.

Do not apply directly into or onto water.  
Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Ecotoxic herbicide. Not to be used on turf. Treated vegetation shall not be disposed of at any green waste recycling centre.

#### **RESPONSE**

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice.

P391 - Collect spillage.

#### **DISPOSAL**

P501 - Dispose of contents/container in accordance with local regulations.

Container disposal: Ensure the container is empty. Triple rinse empty container and add rinsate to the spray tank. Recycle empty container through Agrecovery® (0800 247 326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

Product disposal: Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.

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### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### **Substance/preparation Information on hazardous ingredients**

| <b>Common name</b> | <b>CAS No</b> | <b>%</b> |
|--------------------|---------------|----------|
| Clopyralid         | 1702-17-6     | 26.7     |
| Picloram           | 1918-02-1     | 6.7      |

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### **4. FIRST-AID MEASURES**

#### **Description of necessary first aid measures:**

#### **Effects and symptoms**

#### **First-aid measures**

#### **Inhalation:**

Keep calm, move to fresh air. Seek medical attention.

#### **Ingestion:**

Rinse mouth; do not induce vomiting. Seek medical attention.

#### **Skin contact:**

Remove contaminated clothing. Rinse skin immediately with running water

#### **Eye contact:**

Flush immediately with running water.

#### **Notes to a physician:**

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

#### **Extinguishing media:**

Water spray or fog. Foam. Carbon dioxide. Dry powder.

#### **Hazardous thermal**

#### **(de)composition products:**

During fire, smoke may contain original material in addition to combustion products of varying composition.

#### **HAZCHEM Code:**

2X

#### **Protection of fire-fighters:**

Wear protective clothing and use self-contained breathing apparatus.

Keep containers cool by spraying with water. Contain run-off to prevent entry into water or drainage systems.

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### **6. ACCIDENTAL RELEASE MEASURES**

#### **Personal precautions:**

Wear suitable protective clothing (see Section 8).  
Provide sufficient ventilation and exhaustion.

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|                                   |   |
|-----------------------------------|---|
| <b>Environmental precautions:</b> | Avoid contact with skin, eyes and clothes.<br>Prevent product from entering soil, drains or surface waters.   |
| <b>Methods for cleaning up:</b>   | Large Amounts: Do not allow spreading and pump into suitable containers. Remove and dispose of contaminated soil.<br>Small Amounts: Cover spilled product with moisture binding material (e.g. Universal binding agent), take up mechanically and store in closed containers. Dispose of according to Section 13. |

## 7. HANDLING AND STORAGE

|                             |   |
|-----------------------------|---|
| <b>Handling:</b>            | Keep out of reach of children<br>Keep container tightly closed.<br>Keep away from food, drink and animal feedstuffs.<br>Do not breathe vapour. Avoid contact with skin.<br>This material and its container must be disposed of in a safe manner.<br>Wear suitable protective clothing and gloves.<br>In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).<br>In case of accident by inhalation: Remove casualty to fresh air and keep at rest. |
| <b>Storage:</b>             | Store product in compliance with local regulations. Store in a cool, dry, well-ventilated place in its original containers. Protect from excessive cold or heat.  |
| <b>Packaging materials:</b> |   |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace Exposure Guidelines

**Exposure Standards:**

### Engineering measures

**Exposure control measures:**

### Personal Protective Equipment

**Detail specifications for equipment:**

**Respiratory system:**

For most conditions no respiratory protection is needed. In case respiratory irritation is experienced, the use of an approved air-purifying respirator is recommended. In emergency conditions, use a self-contained breathing apparatus.

**Skin and body:**

**Hands:**

Protective suit, solid shoes  
Chemical-resistant protective gloves to DIN 374-3 recommended materials: nitrile, Neopreen, vinyl. No data available for penetration time. Consult protective glove manufacturer for further information.

**Eyes:**

**General hygiene:**

Wear safety, dustproof goggles or face protection.  
After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                         |
|---|-------------------------|
| <b>Appearance (physical state, colour, etc.):</b> | Liquid. Dark brown.     |
| <b>Odour:</b>                                     | Characteristic odour.   |
| <b>Odour threshold:</b>                           |                         |
| <b>pH:</b>  | 6.0-8.0 (CIPAC MT 75.1) |
| <b>Melting point/freezing point:</b>              | NA                      |
| <b>Initial boiling point and boiling range:</b>   | NA                      |

|   |   |
|---|---|
| Flash point:                                  | NA  |
| Flammability (solid, gas):                    | Non-flammable (formulation based on water). |
| Upper/lower flammability or explosive limits: | NA  |
| Vapour pressure:                              | NA  |
| Vapour density:                               | ca. 1.14 g/cm <sup>3</sup> (20°C)           |
| Relative density:                             | NA  |
| Solubility(ies):                              | NA  |
| Partition coefficient: n-octanol/water:       | NA  |
| Auto-ignition temperature:                    | >625°C                                      |
| Decomposition temperature:                    | NA  |
| Kinematic viscosity:                          | NA  |
| Particle characteristics:                     | NA  |

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## 10. STABILITY AND REACTIVITY

|                                   |   |
|-----------------------------------|---|
| Stability:                        | Stable under normal ambient and anticipated storage conditions. |
| Conditions to avoid:              | Extreme temperatures.   |
| Materials to avoid:               | Strong basic, acidic or oxidising materials.                    |
| Hazardous Decomposition Products: | None under normal conditions.                                   |
| Hazardous polymerization:         |   |

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## 11. TOXICOLOGICAL INFORMATION

### Clopyralid tech basis:

|                                    |  |
|------------------------------------|--|
| Acute toxicity – Oral:             | LD <sub>50</sub> oral >3750 mg/kg, rat.        |
| Acute toxicity - Dermal:           | LD <sub>50</sub> dermal >2000 mg/kg, rat.      |
| Acute toxicity – Inhalation:       | LD <sub>50</sub> inhalation > 0.38 mg/kg, rat. |
| Skin irritation:                   | Not irritant (rabbit).                         |
| Eye irritation:                    | Irritating to the eye (rabbit).                |
| Respiratory or skin sensitization: |  |
| Germ cell mutagenicity:            |  |
| Carcinogenicity:                   |  |
| Reproductive toxicity:             |  |
| Aspiration hazard:                 |  |
| STOT-single exposure:              |  |
| STOT-repeated exposure:            |  |

### Picloram Tech Basis:

|                              |   |
|------------------------------|---|
| Acute toxicity – Oral:       | LD <sub>50</sub> oral = 1061 mg/kg, mouse |
| Acute toxicity - Dermal:     |   |
| Acute toxicity – Inhalation: |   |
| Skin irritation:             |   |
| Eye irritation:              | Irritating to the eye (mouse).            |

|                                    |                |
|------------------------------------|----------------|
| Respiratory or skin sensitization: |                |
| Germ cell mutagenicity:            | Not classified |
| Carcinogenicity:                   | Not classified |
| Reproductive toxicity:             | Not classified |
| Aspiration hazard:                 | Not classified |
| STOT-single exposure:              |                |
| STOT-repeated exposure:            |                |

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## 12. ECOLOGICAL INFORMATION

|                    |  |
|--------------------|--|
| Ecology – general: | Toxic to aquatic life with long lasting effects. |
|--------------------|--|

**Hazardous to the aquatic environment, short-term (acute):**

**Classification procedure - Hazardous to the aquatic environment, short-term (acute):**

**Clopyralid tech basis:**

Toxicity to fish: LC<sub>50</sub> (96h) 103.5 mg/L rainbow trout  
Toxicity to daphnia: EC<sub>50</sub> (48h) 225 mg/L daphnia magna  
Toxicity to algae: EC<sub>50</sub> (96 h) 6.9 mg/L (cell count)  
Toxicity to birds: LD<sub>50</sub> >2.000 mg/kg, bobtail quail

**Picloram tech basis:**

Toxicity to fish: LC<sub>50</sub> (96h) 14.5 mg/L bluegill sunfish  
Toxicity to daphnia: LC<sub>50</sub> (48h) 34.4 mg/L daphnia magna  
Toxicity to algae: EC<sub>50</sub> (96 h) 36.9 mg/L  
Toxicity to birds: LD<sub>50</sub> >5.000 mg/kg, mallard duck

**Toxicity to terrestrial vertebrates:**

Hazardous to terrestrial vertebrates.

**Toxicity to terrestrial invertebrates:**

Hazardous to soil organisms.

Non-toxic to bees.

**Persistence and degradability:**

**Bioaccumulative potential:**

**Partition coefficient n-octanol/water (Log Kow):**

**Mobility in soil:**

**Other adverse effects:**

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### 13. DISPOSAL CONSIDERATIONS

**Methods of disposal:**

Treated vegetation shall not be disposed of at any green waste recycling centre. Do not dispose of together with domestic waste. Product residues and contaminated packages should be transferred to a hazardous waste landfill according to local regulations.

**Empty container precautions:**

Triple rinse container and add recycle through the Agrecovery Programme. If this is not possible, bury in landfill.  
Avoid contamination of any water supply with chemical or empty container.

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### 14. TRANSPORT INFORMATION - International transport regulations

**UN number:** UN3082  
**Hazchem:** 2X  
**Class or Division:** 9  
**Subsidiary Class:** NA  
**Packing Group:** III  
**Marine Pollutant:** Yes  
**Proper shipping name:** Environmentally Hazardous Substance Liquid N.O.S. (Clopyralid & Picloram)

**INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):**

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### 15. REGULATORY INFORMATION

**ACVM Registered Number:** P008319  
**HSNO Approval Code:** HSR100032

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### 16. OTHER INFORMATION

**Additional information:**

**Original Issue Date:** October 2011

**Revision Date:** 28 January 2025

**Replaces:** ES592

**Disclaimer EXCLUSION OF LIABILITY: PLEASE READ**

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