



SAFETY DATA SHEET

MONARCH™

Date of Issue: December 2010

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Clopyralid 267 g/L + Picloram 67 g/L
Recommended use: Herbicide

Supplier: Agrisource Ltd
PO Box 789
Pukekohe

Emergency telephone number: 0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: 6.4A, 9.1C, 9.2A, 9.3C
Required identification Details: Harmful: May cause mild skin irritation and sensitisation from Prolonged skin contact. May cause eye irritation. Avoid skin or eye contact. Avoid spray mist
Ecotoxic: Very toxic to aquatic organisms. Avoid contamination of any water supply with product or empty container. Very toxic to the soil environment. Selective herbicide – very toxic to some plant species (certain plants maybe killed or damaged from root uptake of this product). Do not allow spray drift outside the target area.
Harmful to Terrestrial Vertebrates. Do not allow animals or birds access to the undiluted material or unused spray mix.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Clopyralid	1702-17-6	26.7
Picloram	1918-02-1	6.7

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:	
Workplace facilities:	
Required Instructions:	

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:

Extinguishing media :	Water fog or spray. Carbon dioxide, foam or dry chemical powder.
Hazardous thermal (de)composition products:	During fire, smoke may contain original material in addition to combustion products of varying composition
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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear suitable protective clothing (see Section 8) Provide sufficient ventilation and exhaustion. Avoid contact with skin, eyes and clothes.
Environmental precautions:	Prevent product from entering soil, drains or surface waters.
Methods for cleaning up:	Large Amounts: Do not allow spreading and pump into suitable containers. Remove and dispose of contaminated soil. 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

Handling:	Keep out of reach of children Keep container tightly closed. Keep away from food, drink and animal feedstuffs. Do not breathe vapour. Avoid contact with skin. This material and its container must be disposed of in a safe manner. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
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In case of accident by inhalation: Remove casualty to fresh air and keep at rest.

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.

Storage:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Workplace exposure standards:

Application in the workplace:

Exposure Standards outside:

The workplace:

Engineering measures

Hierarchy of controls:

Exposure control measures:

No Hazard indication:

Ventilation specification:

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.

Protective suit, solid shoes.

Skin and body:

Hands:

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

Eyes:

Wear safety, dustproof goggles or face protection.

General hygiene:

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:

liquid

Colour:

Dark brown

Odour:

Characteristic

pH (1%):	6.0-8.0 (CIPAC MT 75.1)
Vapour Pressure:	
Vapour Density:	ca. 1.14 g/cm ³ (20°C)
Boiling Point:	
Freezing/melting point:	
Solubility:	
Specific gravity or density:	
Information for flammable material including:	
- Lower and upper flammability limits	Non-flammable
- Flashpoint (state test Method)	Non-flammable (formulation based on water)
Auto – ignition Temperature:	>625 °C
Octanol/water partition coefficient:	
Explosion properties:	
Oxidation properties:	

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:	
Specific Data:	
Hazardous reactions :	

11. TOXICOLOGICAL INFORMATION

Clopyralid tech basis:

Acute toxicity – Oral :	LD ₅₀ oral >3750 mg/kg, rat
Acute toxicity - Dermal :	LD ₅₀ dermal >2000 mg/kg, rat
Acute toxicity – Inhalation:	LD ₅₀ inhalation > 0.38 mg/kg, rat

Primary skin irritation : Not irritant (rabbit).

Eye irritation: Irritant (rabbit)

Picloram tech basis:

Acute toxicity – Oral :	LD ₅₀ oral
Acute toxicity - Dermal :	LD ₅₀ dermal
Acute toxicity – Inhalation:	LD ₅₀ inhalation

Skin irritation :

Eye irritation:

Dermal sensitisation:

Not classified as carcinogenic, mutagenic, toxic for reproduction.

12. ECOLOGICAL INFORMATION

Clorpyralid tech basis:

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

Picloram tech basis:

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

Bee toxicity Non toxic

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Do not dispose of together with domestic waste. Product residues and contaminated packages should be transferred to a suitable incinerator or hazardous waste landfill according to local regulations.

14. TRANSPORT INFORMATION

International transport regulations

International transport regulations:

UN number: 3082

Land - Road/Railway

Proper shipping name : Environmentally Hazardous Substance Liquid N.O.S. (Clorpyralid & Picloram)

15. REGULATORY INFORMATION

ACVM Registered Number:

HSNO Approval Code:

16. OTHER INFORMATION

Additional information:

Disclaimer

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