

MATERIAL SAFETY DATA SHEET

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Date of Issue: January 2013
MSDS No. FMC/CLO750/1

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: FMC Clopyralid 750 WG Herbicide

Other Names: Clopyralid, a Group I Herbicide. Pyridinecarboxylic acid derivative.
Use: Agricultural herbicide to control broadleaf weeds
Company: FMC Crop Protection Pty Ltd.
Address: 5 Palmer Place, Murarrie, Qld 4172
Telephone Number: 07 3908 9222 **Fax Number:** 07 3908 9221
Emergency Telephone Number: 1800 033 111 (All hours - Australia wide).

SECTION 2 HAZARDS IDENTIFICATION

**Not classified as Hazardous according to criteria of the Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code.**

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

<i>CHEMICAL</i>	<i>CAS NUMBER</i>	<i>PROPORTION</i>
Clopyralid (present as the potassium salt)	58509-83-4	750 g/kg
Other non hazardous ingredients		Balance

SECTION 4 FIRST AID MEASURES

Ingestion: If poisoning occurs, contact a doctor or the Poisons Information Centre, phone Australia 13 11 26. Wash mouth out with water and give water to drink.

Skin: Brush granules gently off clothing and skin. Remove contaminated clothing. Wash skin thoroughly with soap and water. If skin is irritated, seek medical advice.

Eye: Brush granules gently away. Hold eyes open and flood with clean water. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.

Inhalation: Remove affected person to fresh air until recovered.

Advice to Doctor: Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Not flammable. There is no risk of an explosion from this product under normal circumstances if involved in a fire.

Extinguishing media: Choose extinguishing media to suit the burning material. If waterspray is used, contain all runoff.

Hazards from combustion products: When involved in a fire may produce toxic and noxious fumes such as hydrogen chloride or phosgene. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: Isolate and post spill area. In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear elbow-length PVC gloves and face shield or goggles. In the case of spillage, stop leak if safe to do so, and contain spill. Sweep up product without generating dust and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Keep out animals and unprotected persons. Keep out unprotected persons and animals.

Material and methods for containment and cleanup procedures: To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: Ensure containers are kept closed until using product. Will irritate the eyes. Avoid contact with eyes. Wash hands after use. When opening the container and preparing the product for use, and when using the prepared spray, wear elbow-length PVC gloves and face shield or goggles. After each day's use, wash gloves and face shield or goggles.

Conditions for Safe Storage: DO NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in the closed original container, in a cool well ventilated area, out of direct sunlight. Store in a room or place away from children, animals, food, feed stuffs, seed and fertilizers. 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.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**National Exposure Standards:**

Exposure guidelines have not been established for this product by safe Work Australia, however, the TWA exposure standard for dusts not otherwise specified is 10 mg/m³.

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Use in ventilated areas only. Use local exhaust at all process locations. Ventilate all transport vehicles prior to unloading. Keep containers closed when not in use.

Personal Protective equipment (PPE):

General: When opening the container and preparing the product for use, and when using the prepared spray, wear elbow-length PVC gloves and face shield or goggles. After each day's use, wash gloves and face shield or goggles.

Personal Hygiene: Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid granules.
Appearance:	Off-white coloured granules.
Solubility in Water:	Disperses in water.
Vapour Pressure:	1.33 mPa at 24°C for clopyralid acid.
Flammability:	Non combustible material.
Poison Schedule:	This product is a schedule 5 (S5) poison.
Formulation type:	Water dispersible granule.
Poison Schedule:	This product is a schedule 5 (S5) poison.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight.

Incompatible materials: Strong acids, strong bases and strong oxidising agents.

Hazardous decomposition products: When burnt it will produce toxic fumes.

Hazardous reactions: No special considerations. Will not polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

ACUTE EFFECTS

Ingestion: The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. Acute Oral LD₅₀ > 3500 mg/kg (rats) for similar formulation.

Skin: May cause sensitisation by skin contact. This product is not a skin irritant. Acute dermal LD₅₀ > 2,000 mg/kg for similar formulation.

Eye: May cause slight irritation to the eyes.

Inhalation: The components of the product are of low volatility and no adverse effects are expected from handling the concentrate. When applying the product as a spray avoid breathing in spray mist.

Chronic Effects

Data indicates no reproductive or mutagenic effects. The weight of the evidence is that clopyralid is not carcinogenic.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: No data is available on this product. The following is data for the active ingredient, clopyralid. LC₅₀ (96 hr) for rainbow trout is 103.5 mg/L. LC₅₀ (96 hr) for bluegill sunfish is 125.4 mg/L and EC₅₀ (48hr) is 225 mg/L. Birds: slightly toxic to birds on an acute basis LD₅₀ is 1465 mg/kg, but practically non-toxic on a dietary basis LC₅₀ > 5000 mg/kg. Bees: Not toxic to bees LD₅₀ >100 µg/bee. Toxic to aquatic organisms - algae LC₅₀ 6.9 mg/L..

Environmental Properties: Half life in soil is typically 8 - 66 days. Rapid degradation in soil prevents significant downward movement under normal conditions. Based completely on information for clopyralid acid, Clopyralid is weakly sorbed (Mean K_{oc} ~5 mL/g) indicating potential for mobility. Degradation is retarded under cold conditions or very dry soils. Clopyralid degrades slowly in water/sediment systems (t_{1/2} = 143-182 days). Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills & Disposal: Isolate and post spill area. Wear prescribed protective clothing and equipment. Large spills should be dyked or covered to prevent dispersal. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. 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 (ChemClear®).

SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

Disposal of empty containers: Triple or preferably pressure rinse containers before disposal. Add rinsings to tank mix. Do not dispose of undiluted chemicals on-site. If not recycling, break, crush, or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

SECTION 14 TRANSPORT INFORMATION

Transport Information: It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.

Storage & Transport: Not Classified as a Dangerous Good.

SECTION 15 REGULATORY INFORMATION

Not classified as a hazardous substance according to criteria of the Safe Work Australia.

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a schedule 5 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 67807.

Product is not classified as a Dangerous Good according to the ADG Code (7th Ed).

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16 OTHER INFORMATION

Issue Date: 25 January 2013. Valid for 5 years. (First issue).

Key to abbreviations and acronyms used in this MSDS:

ADG Code: Australian Dangerous Goods Code (for the transport of Dangerous Goods by Road and Rail).

ASCC: Australian Safety & Compensation Council (formally known as the National Occupational Health & Safety Commission (NOHSC)).

Carcinogen: An agent which is responsible for the formation of a cancer.

Genotoxic: Capable of causing damage to genetic material, such as DNA.

Lacrimation: The production, secretion, and shedding of tears.

Lavage: A general term referring to cleaning or rinsing.

NOHSC: National Occupational Health and Safety Commission.

Pneumonitis: A general term that refers to inflammation of lung tissue.

PPE: Personal protective equipment.

Teratogen: An agent capable of causing abnormalities in a developing foetus.

TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. "Search Hazardous Substances". Safe Work Australia website. (2013).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Standard for the Uniform Scheduling of Medicines and Poisons. No. 3. Medicines and Poisons Scheduling Secretariat. June 2012.

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SECTION 16 OTHER INFORMATION (Continued)

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

End of MSDS