

Infosafe No™ 3NV3X	Issue Date : October 2019	ISSUED by NUFARM
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 Product Name **ARCHER®750**

1. Identification

GHS Product Identifier	ARCHER®750
Product Code	00100
Product Type	Selective herbicide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150
Emergency phone number	0800 651 911
Email	nzinfo@nufarm.com
Recommended use of the chemical and restrictions on use	Herbicide for the control of certain broadleaf weeds in a wide range of crops.
Other Information	This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. Hazard Identification

Signal Word (s)	DANGER
Hazard Statement (s)	H372 Causes damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects. H421 Very toxic to soil environment. H432 Toxic to terrestrial vertebrates.
General Precautionary Statement (s)	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
Pictogram (s)	Health hazard, Environment,



Precautionary statement – Prevention	P103 Read label before use. P264 Wash hands and face thoroughly after handling. P270 Do not eat, drink or smoke when using this product.
Precautionary statement – Response	P314 Get medical advice/attention if you feel unwell. P391 Collect spillage.
Precautionary statement – Disposal	P501 Dispose of contents only by using according to the label or at an approved landfill.
Other Information	6.9A target organ toxicant, 9.1C aquatic toxicant, 9.2A soil toxicant, 9.3B terrestrial vertebrate toxicant,

3. Composition/information on ingredients

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Clopyralid (present as the dimethylamine and methylamine salts)	1072-17-6	750 g/L
	Other non hazardous ingredients		Balance

4. First-aid measures

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First Aid Measures	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
Inhalation	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
Skin	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.
Eye contact	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically.

5. Fire-fighting measures

Suitable 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	Full protective clothing and self-contained breathing apparatus.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems. Keep containers cool with water spray.
Hazchem Code	2Z
Decomposition Temp.	Data not available.
Other Information	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: Not applicable

6. Accidental release measures

Spills & Disposal	Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions	Prevent product or washings from entering drains, waterways or sewers, and prevent contamination of soil. This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. Handling and storage

Precautions for Safe Handling	Do not handle until all safety precautions have been read and understood. The person mixing or applying ARCHER 750 must be a 'Qualified Contractor' or 'Qualified Loader'. For more information refer to the Hazardous Substances Property Controls Notice 2017. It is the duty of the PCBU that a person who uses, handles, manufactures or stores a hazardous substance (including hazardous waste) is provided information, instruction and training in accordance with Regulation 4.5 of the Health and Safety at work (Hazardous Substances) Regulations 2017. Avoid skin and eye contact and inhalation of spray mist. CERTIFIED HANDLER: Is not required. TRACKING: Is not required. RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3 litres or more is applied within 24 hours. BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.
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<p>Conditions for safe storage, including any incompatibilities</p> <p>Additional information on precautions for use</p> <p>Other Information</p>	<p>Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers. This product must not be applied onto or into water.</p> <p>Keep out of reach of children.</p> <p>Store in original container tightly closed and in a locked dry, cool area away from foodstuffs, fertilisers and seeds. Storage must be in accordance with NZS 8409 Management of Agrichemicals.</p> <p>Stores containing 100L of ARCHER 750 are subject to signage, 1,000L require secondary containment and more than 1,000L require emergency response plans.</p> <p>Do not use for treating turf that will be mown and the clippings used for making compost; or made available for collection for, or deposited at, a green waste recycling centre.</p> <p>Always read the label and any attached leaflet before use.</p> <p>Aggregate Storage Volume Thresholds: When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.</p>
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8. Exposure controls/personal protection

<p>Occupational exposure limit values</p> <p>Appropriate engineering controls</p> <p>Personal Protective Equipment</p> <p>Hygiene Measures</p>	<p>No Workplace Exposure Standards (WESSs) have been set for clopyralid.</p> <p>No Environmental Exposure Limits (EELs) have been set for substances containing clopyralid.</p> <p>Tolerable Exposure Limits (TELs) have been derived from Acceptable Daily Exposure (ADE) values.</p> <p>ADE for clopyralid is 0.15mg/kg bw/day</p> <p>PDE (food) = 0.105mg/kg bw/day</p> <p>PDE (drinking water) = 0.03mg/kg bw/day</p> <p>Handle in well ventilated areas, generally natural ventilation is adequate.</p> <p>When opening the container, preparing spray and using the prepared spray wear safety goggles, chemically resistant gloves, cotton overalls buttoned to the neck and wrist, and boots.</p> <p>Do not eat, drink or smoke while using.</p> <p>Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.</p> <p>Wash splashes of concentrate from skin immediately.</p>
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9. Physical and chemical properties

Form	Liquid
Appearance	Dark brown clear liquid.
Decomposition Temperature	Data not available.
Freezing Point	Data not available.
Boiling Point	Data not available.
Solubility in Water	Soluble in water.
Specific Gravity	1.284 g/ml
pH	6.0-8.0 (1% aq)
Vapour Pressure	1.33 mPa at 24°C for clopyralid acid
Vapour Density (Air=1)	Data not available.
Partition Coefficient: n-octanol/water	Kow Log P = -1.81 (pH 5) for clopyralid
Flash Point	Not applicable.
Flammability	Non combustible material.
Auto-Ignition Temperature	Not applicable.
Kinematic Viscosity	Data not available.
Other Information	(SL) Soluble concentrate

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10. Stability and reactivity

Chemical Stability Stable under normal conditions of handling and storage.

Hazardous Polymerization Hazardous polymerisation is not possible.

11. Toxicological Information

Toxicology Information No harmful effects are expected if the precautions on the label and this SDS are followed.

Acute Toxicity - Oral LD50 (rat) = 5000 mg/kg for ARCHER 750

Acute Toxicity - Dermal LD50 (rat) > 2000 mg/kg for ARCHER 750

Acute Toxicity - Inhalation LC50 (rat) (4hr) > 5.580 mg/L air for ARCHER 750.

Ingestion The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.

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.

Skin Not classified as a skin irritant.

Eye Not classified as an eye irritant.

Carcinogenicity The weight of the evidence is that clopyralid is not carcinogenic.

Reproductive Toxicity Information not available.

STOT-repeated exposure Target organ toxicant.

Chronic Effects

Mutagenicity Information not available.

Other Information The Australian Acceptable Daily Intake (ADI) for clopyralid for a human is 0.5 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 50 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, Office of Chemical Safety, 'ADI List', December 2014).

12. Ecological information

Persistence and degradability Half life (DT50) in soil for clopyralid is typically 8 - 66 days.

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

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

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

Acute Toxicity - Fish The following data is for the active ingredient, clopyralid.

LC50 (96hr) for rainbow trout is 103.5 mg/l

LC50 (96hr) for bluegill sunfish is 125.4 mg/l

EC50 (48hr) is 225 mg/l.

Acute Toxicity - Daphnia

Acute Toxicity - Algae EC50 (96h) Algae: *Selenastrum capricornutum* = 6.9 mg/L (clopyralid technical)

Acute Toxicity - Other Organisms Birds: Not toxic to birds. LD50 for bobwhite quail is > 2000 mg/kg

Bees: Not toxic to bees. LD50 > 100 µg/bee

13. Disposal considerations

Product Disposal Dispose of product only by using according to the label, or at an approved landfill.

Container Disposal Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

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14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
U.N. Number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (clopyralid 75%)
Transport hazard class(es)	9
Hazchem Code	2Z
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. Regulatory information

National and or International Regulatory Information	Registered pursuant to the ACVM Act 1997, No. P9693 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR101372 See www.epa.govt.nz for approval controls.
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16. Other Information

Date of preparation or last revision of SDS	October 2016
Contact Person/Point	IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE 24Hr Tollfree Emergency No: 0800 651 911 24Hr Emergency No: National Poisons Centre Phone: 0800 764 766
Revisions Highlighted	Not applicable. First issue. ...End Of MSDS...

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