

Infosafe No™ 3NUAO	Issue Date : September 2020	ISSUED by NUFARMNZ
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 Product Name **AVADEX® XTRA**

1. Identification

GHS Product Identifier	AVADEX® XTRA
Product Code	00095
Product Type	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
E-mail Address	nzinfo@nufarm.com
Recommended use of the chemical and restrictions on use	Selective herbicide for the pre-emergence control of wild oats in barley, wheat, peas and linseed.
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

GHS classification of the substance/mixture	DANGEROUS GOODS.
Other Information	6.1E acute toxicant, 6.3A skin irritant, 6.4A eye irritant, 6.5B sensitiser, 9.1A aquatic toxicant, 9.2A soil toxicant. TOXICITY Harmful-may be harmful if swallowed, inhaled or absorbed through the skin, may cause skin and eye irritation. May cause sensitisation from prolonged skin contact. ECOTOXIC Very toxic to aquatic organisms. Very toxic to soil environment. Selective herbicide-very toxic to some plant species.

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Tri-allate	2303-17-5	500 g/L
	Aromatic hydrocarbon solvent	64742-94-5	30-60 %
	Proprietary surfactants		0-10 %

4. First-aid measures

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. Remove contact lenses if present and easy to do. Seek medical assistance.

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First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically. If vomiting and aspiration occurs solvent present may cause pulmonary pneumonitis. In case of ingestion, gastric lavage may be indicated.

5. Fire-fighting measures

Suitable extinguishing media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	May emit toxic fumes of hydrogen chloride, oxides of sulphur and other compounds of chlorine or sulphur 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.
Specific hazards arising from the chemical	Concentrate is combustible and will burn if sufficient heat and oxygen are available.
Hazchem Code	2Z
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. Eliminate all ignition sources and naked lights. Use non-sparking utensils. 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 from entering drains, waterways or sewers. This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. Handling and storage

Precautions for Safe Handling	Avoid skin and eye contact and inhalation of spray mist. APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner, or used by a commercial contractor. TRACKING: Is not required. RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3L or more is applied within 24 hours. Do not allow drift to occur outside the target area.
Conditions for safe storage, including any incompatibilities	Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool well ventilated area, away from foodstuffs, fertilisers and seeds. Store above 0°C to prevent freezing. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100L of AVADEX XTRA require secondary containment and are subject to signage and more than 100L require emergency response plans.
Other Information	Always read the label and any attached leaflet before use. 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.

8. Exposure controls/personal protection

Occupational exposure limit values	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
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Appropriate engineering controls	Store or handle in a well ventilated area to minimise exposure and build up of combustible vapours. Use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Do not use, pour, spill or store near heat or flame.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.
Hygiene Measures	Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. Physical and chemical properties

Form	Liquid
Appearance	Amber to brown liquid
Boiling Point	160°C
Solubility in Water	Forms an emulsion in water.
Specific Gravity	1.053
pH	7
Vapour Pressure	16mPa @ 25°C (Tri-allylate)
Vapour Density (Air=1)	> air
Volatile Component	45% (solvent)
Flash Point	>62°C (TCC)
Flammability	Combustible
Other Information	(EC) Emulsifiable concentrate

10. Stability and reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Possibility of hazardous reactions	Hydrolysed by strong acids and alkalis.
Hazardous Polymerization	Hazardous polymerisation will not occur.
Other Information	Freezing will result in crystals, which can settle to the bottom. If allowed to freeze, place in a warm room (22 degrees C) and roll and shake the can frequently for several days to redissolve before using.

11. Toxicological Information

Toxicology Information	Data listed below is for the active ingredient unless otherwise stated.
Acute Toxicity - Oral	LD50 (rat) 1100mg/kg.
Acute Toxicity - Dermal	LD50 (rabbit) percutaneous 8200mg/kg. Practically non-toxic.
Acute Toxicity - Inhalation	LC50 (rat) (12hr) >5.3mg/L. Practically non-toxic.
Ingestion	Slightly toxic. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed. Coughing, choking and shortness of breath may occur if material is accidentally drawn into the lungs during swallowing or vomiting. This product contains hydrocarbon solvents and an emulsifier which if swallowed, may result in stomach upset with nausea and vomiting, and central nervous system depression including headache, dizziness, fatigue, and with more severe exposures, incoordination and unconsciousness.

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Inhalation	Slightly toxic if inhaled. Inhalation of the hydrocarbon solvent vapours may be irritating to the respiratory tract. Prolonged or excessive inhalation of the hydrocarbon solvent vapours in the product may result in central nervous system (CNS) depression.
Skin	May result in slight to moderate irritancy on the skin. Prolonged or repeated contact with the solvents and emulsifier in this product may cause pain, redness and dry skin, resulting in contact dermatitis.
Eye	May cause pain, redness and tearing. Direct contact or excessive exposure to the hydrocarbon solvent vapours may result in eye irritation.
Reproductive Toxicity	No birth defects were noted in rats and rabbits given tri-allate orally during pregnancy, even at amounts which produced toxic effects in the mothers and their offspring. Clinical signs of toxicity, reduced body and pup weights, and effects on some reproductive parameters (second generation only) were noted when rats were fed tri-allate for two successive generations.
Chronic Effects	Abnormal behavioural effects have been observed in laboratory animals following single and repeated oral doses of tri-allate. There is no evidence of delayed neurotoxicity effects in chickens (repeat oral and dermal doses) or cholinesterase inhibition in rats (single oral doses).
Serious eye damage/irritation	Moderately irritating (rabbit)
Skin corrosion/irritation	Slightly irritating (rabbit, 24hr)

12. Ecological information

Ecological Information	AVADEX XTRA herbicide is moderately toxic to some fish and practically non-toxic to bees.
Environmental Fate	Tri-allate tends to be strongly adsorbed to soil. Biodegradation in soil is dependent on temperature, moisture and other factors. Half life in soil is generally 8-11 weeks.
Bioaccumulative Potential	Tri-allate bioaccumulates in fish, Kow logP = 4.6
Acute Toxicity - Fish	LC50 (96hr) Bluegill sunfish 1.3mg/L LD50 (96hr) Rainbow trout 1.2mg/L
Acute Toxicity - Daphnia	LC50 (48hr) Daphnia magna 0.43mg/L
Acute Toxicity - Algae	EC50 (96hr) Selenastrum capricornutum 0.12mg/L
Acute Toxicity - Other Organisms	LD50 (oral) Bobwhite quail 2251mg/kg LC50 dietary (8 day) Mallard duck >5620pm

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.

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. - (tri-allate, 50%)
Transport hazard class(es)	9
Hazchem Code	2Z
Packaging Method	-
Packing Group	III



Safety Data Sheet

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EPG Number -
IERG Number 47
IMO Marine Pollutant Yes. Marine Pollutant mark required.
IMDG EMS F-A, S-F
Other Information Do not carry this product on a passenger service vehicle.

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.P9221
See www.foodsafety.govt.nz for registration conditions.
Approved pursuant to the HSNO Act 1996, Approval Code HSR000571
See www.epa.govt.nz for approval controls.
Packaging & Labelling HARMFUL * ECOTOXIC - keep out of reach of children
Hazard Rating Systems NFPA/HMIS: 2-2-1

16. Other Information

Date of preparation or last revision of SDS September 2015
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 5 yearly review carried out.
Other Information Supersedes SDS issued July 2015
...End Of MSDS...

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