

Infosafe No™ 3NUA0 Issue Date : October 2024 ISSUED by NUFARMNZ

Product Name **AVADEX® XTRA**

## Section 1 - Identification

<b>Product Identifier</b>	AVADEX® XTRA
<b>Product Code</b>	0782
<b>Product Type</b>	Herbicide
<b>Company Name</b>	Nufarm NZ
<b>Address</b>	Central Park, Building 3, Level 4, 666 Great South Road Ellerslie Auckland 1051 New Zealand
<b>Telephone/Fax Number</b>	Tel: 0-9-270 4150
<b>Emergency Phone Number</b>	0800 651 911
<b>Email</b>	nzinfo@nufarm.com
<b>Recommended uses and any restrictions on use or supply</b>	Selective herbicide for the pre-emergence control of wild oats in barley, wheat, peas and linseed.
<b>Other Information</b>	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.

## Section 2 - Hazard(s) Identification

<b>GHS classification of the substance/mixture</b>	Aspiration hazard: Category 1 Skin corrosion/irritation: Category 2 Eye irritation Category 2 Skin sensitization: Category 1 Hazardous to the terrestrial environment: Hazardous to soil organisms Hazardous to the aquatic environment acute Category 1 Hazardous to the aquatic environment chronic Category 1
<b>Signal Word (s)</b>	DANGER
<b>Hazard Statement (s)</b>	H304 May be fatal if swallowed and enters airways. H315 causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects. H421 Very toxic to the soil environment.
<b>Precautionary Statement – General</b>	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read carefully and follow all instructions.
<b>Pictogram (s)</b>	Health hazard, Environment



<b>Precautionary Statement – Prevention</b>	P264 Wash hands and face thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
<b>Precautionary Statement – Response</b>	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P331 Do NOT induce vomiting. P332+P313 If skin irritation occurs: Get medical advice/attention.

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<b>Precautionary Statement – Storage</b>  <b>Precautionary Statement – Disposal</b>	P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. P391 Collect spillage. P405 Store locked up.  P501 Dispose of contents/container to an approved landfill.
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## Section 3 - Composition and Information on Ingredients

<b>Chemical Characterization</b>	Liquid		
<b>Ingredients</b>	<u><b>Name</b></u>	<u><b>CAS</b></u>	<u><b>Proportion</b></u>
	Tri-allate	2303-17-5	500 g/L
	Aromatic hydrocarbon solvent	64742-94-5	30-60 %
	Proprietary surfactants		0-10 %

## Section 4 - First Aid Measures

<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Skin</b>	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.
<b>Eye</b>	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.
<b>First-aid Facilities</b>	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
<b>Advice to Doctor</b>	Treat symptomatically. If vomiting and aspiration occurs solvent present may cause pulmonary pneumonitis. In case of ingestion, gastric lavage may be indicated.

## Section 5 - Firefighting Measures

<b>Suitable Extinguishing Media</b>	Water fog, foam, carbon dioxide or dry chemical.
<b>Hazards from Combustion Products</b>	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.
<b>Special protective equipment for fire-fighters</b>	Full protective clothing and self-contained breathing apparatus.
<b>Specific Methods</b>	Keep up wind. Do not allow washings to reach sewage or effluent systems.
<b>Specific hazards arising from the chemical</b>	Concentrate is combustible and will burn if sufficient heat and oxygen are available.
<b>Hazchem Code</b>	2Z
<b>Decomposition Temperature</b>	Information is not available.
<b>Other Information</b>	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: Not applicable

## Section 6 - Accidental Release Measures

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<b>Spills and Disposal</b>	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.
<b>Personal Protection</b>	For appropriate personal protective equipment (PPE), refer Section 8.
<b>Environmental Precautions</b>	Prevent from entering drains,waterways or sewers. This product is a herbicide and spills can damage crops,pastures and desirable vegetation.

## Section 7 - Handling and Storage

<b>Precautions for Safe Handling</b>	The person mixing or applying AVADEX XTRA must be a 'Qualified Contractor' or a 'Qualified Person'. The spray mixture may also be prepared by a 'Qualified Loader'. 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. This product must not be applied onto or into water. 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 of AVADEX XTRA is applied within 24 hours. Records must be kept for a minimum of 3 years from application date.
<b>Conditions for safe storage, including any incompatibilities</b>	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.
<b>Other Information</b>	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.

## Section 8 - Exposure Controls and Personal Protection

<b>Occupational Exposure Limits (OEL)</b>	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
<b>Appropriate Engineering Controls</b>	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.
<b>Personal Protective Equipment</b>	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.
<b>Hygiene Measures</b>	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.

## Section 9 - Physical and Chemical Properties

<b>Form</b>	Liquid
<b>Appearance</b>	Amber to brown liquid.
<b>Odour</b>	Information is not available.
<b>Decomposition Temperature</b>	Information is not available.

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<b>Melting Point</b>	29-30°C for active ingredient tri-allate.
<b>Boiling Point</b>	160°C
<b>Solubility in Water</b>	Forms an emulsion in water.
<b>Specific Gravity</b>	1.053
<b>pH</b>	7
<b>Vapour Pressure</b>	16mPa (25°C) for active ingredient tri-allate.
<b>Vapour Density (Air=1)</b>	> air
<b>Odour Threshold</b>	Information is not available.
<b>Volatile Component</b>	45% (solvent)
<b>Partition Coefficient: n-octanol/water</b>	Kow logP = 4.6 for active ingredient tri-allate.
<b>Flash Point</b>	>62°C (TCC)
<b>Flammability</b>	Combustible.
<b>Auto-ignition Temperature</b>	Information is not available.
<b>Flammable Limits - Lower</b>	Information is not available.
<b>Flammable Limits - Upper</b>	Information is not available.
<b>Kinematic Viscosity</b>	Information is not available.
<b>Particle Characteristics</b>	Information is not available.
<b>Other Information</b>	(EC) Emulsifiable concentrate

## Section 10 - Stability and Reactivity

<b>Chemical Stability</b>	Stable under normal conditions of handling and storage.
<b>Possibility of Hazardous Reactions</b>	Hydrolysed by strong acids and alkalis.
<b>Hazardous Polymerization</b>	Hazardous polymerisation will not occur.
<b>Other Information</b>	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.

## Section 11 - Toxicological Information

<b>Acute Toxicity - Oral</b>	LD50(rat) 1100mg/kg for active ingredient tri-allate.
<b>Acute Toxicity - Inhalation</b>	Inhalation of saturated air (5.3mg/L) for 12h had no harmful effect on rats for active ingredient tri-allate.
<b>Acute Toxicity - Dermal</b>	Percutaneous LD50(rabbit) 8200mg/kg for active ingredient tri-allate.
<b>Skin Corrosion/Irritation</b>	This product causes skin irritation.
<b>Serious Eye Damage/Irritation</b>	This product causes serious eye irritation.
<b>Skin Sensitisation</b>	This product may cause an allergic skin reaction.
<b>Germ Cell Mutagenicity</b>	Information is not available.
<b>Carcinogenicity</b>	Information is not available.

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<b>Reproductive Toxicity</b>	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.
<b>STOT - Repeated Exposure</b>	Information is not available.
<b>Aspiration Hazard</b>	May be fatal if swallowed and enters airways.
<b>Chronic Effects</b>	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).

## Section 12 - Ecological Information

<b>Ecological Information</b>	AVADEX XTRA herbicide is moderately toxic to some fish and practically non-toxic to bees.
<b>Persistence and Degradability</b>	Tri-allate tends to be strongly adsorbed to soil. Biodegradation in soil is dependent on temperature, moisture and other factors. DT50 (soil) 8-11w for active ingredient tri-allate.
<b>Bioaccumulative Potential</b>	Tri-allate bioaccumulates in fish, Kow logP = 4.6.
<b>Acute Toxicity - Fish</b>	LC50 (96hr) Rainbow trout 1.2mg/L for active ingredient tri-allate.
<b>Acute Toxicity - Daphnia</b>	LC50 (48hr) 0.43mg/L for active ingredient tri-allate.
<b>Acute Toxicity - Algae</b>	EC50 (96hr) Selenastrum capricornutum 0.12mg/L for active ingredient tri-allate.
<b>Acute Toxicity - Other Organisms</b>	Birds: LD50 (oral) Bobwhite quail >2251mg/kg for active ingredient tri-allate. Non-toxic to bees for active ingredient tri-allate.

## Section 13 - Disposal Considerations

<b>Product Disposal</b>	Dispose of product only by using according to the label, or at an approved landfill.
<b>Container Disposal</b>	Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

## Section 14 - Transport Information

<b>Transport Information</b>	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
<b>UN Number</b>	3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (tri-allate)
<b>Hazard Class</b>	9
<b>Hazchem Code</b>	2Z
<b>Packaging Method</b>	-
<b>Packing Group</b>	III
<b>EPG Number</b>	-
<b>IERG Number</b>	47
<b>IMO Marine Pollutant</b>	Yes. Marine Pollutant mark required.
<b>IMDG EMS</b>	F-A, S-F
<b>Other Information</b>	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.

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## Section 15 - Regulatory Information

<b>National and or International Regulatory Information</b>	Registered pursuant to the ACVM Act 1997, No.P9221 See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration conditions. Approved pursuant to the HSNO Act 1996, Approval Code HSR000571 See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for approval controls.
<b>Packaging and Labelling</b>	READ SAFETY DIRECTIONS BEFORE OPENING OR USING KEEP OUT OF REACH OF CHILDREN

## Section 16 - Any Other Relevant Information

<b>Date of preparation or last revision of SDS</b>	September 2020.
<b>Contact Person/Point</b>	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
<b>Revisions Highlighted</b>	Various changes and updates made to the document to comply with GHS7.  ...End Of MSDS...

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