

AVADEX® XTRA

Infosafe No.: 3NUA0
ISSUED Date : 08/07/2026
ISSUED by: Nufarm NZ

Section 1 - Identification

Product Identifier

AVADEX® XTRA

Product Code

0782

Product Type

Herbicide

Company Name

Nufarm NZ

Address

Central Park, Building 3, Level 4, 666 Great South Road Ellerslie
Auckland 1051 New Zealand

Telephone/Fax Number

Tel: 0-9-270 4150

Emergency Phone Number

0800 651 911

Email

nzinfo@nufarm.com

Recommended uses and any restrictions on use or supply

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.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Flammable liquids: Category 4

Acute oral toxicity: Category 4

Aspiration hazard: Category 1

Skin corrosion/irritation: Category 2

Eye irritation Category 2

Skin sensitization: Category 1

Carcinogenicity: Category 2

Specific target organ toxicity (single exposure): Category 3 (Narcotic)

Specific target organ toxicity – repeated exposure: Category 2

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

Signal Word (s)

DANGER

Hazard Statement (s)

H227 Combustible liquid
H302 Harmful if swallowed
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
H351 Suspected of causing cancer
H336 May cause drowsiness or dizziness
H373 May cause damage to organs through prolonged or repeated exposure
H421 Very toxic to the soil environment
H431 Very toxic to terrestrial vertebrates
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Precautionary statement – General

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.

Pictogram (s)

Exclamation mark, Health hazard, Environment

**Precautionary Statement – Prevention**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
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.

Precautionary Statement – Response

P370+P378 In case of fire: Use fog, foam, dry chemical, carbon dioxide or water spray to extinguish.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P330 Rinse mouth.
P331 Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER/doctor if you feel unwell.
P391 Collect spillage.

Precautionary Statement – Storage

P403+P235 Store in a well-ventilated place. Keep cool.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary Statement – Disposal

P501 Dispose of contents/container to an approved treatment facility.

Section 3 - Composition and Information on Ingredients

Chemical Characterization

Liquid

Ingredients

Name	CAS	Proportion
Tri-allylate	2303-17-5	520 g/L
Aromatic hydrocarbon solvent	64742-94-5	470 g/L
Proprietary surfactants		0-10 %
Ingredients determined not to be hazardous		To Balance

Section 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

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.

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.

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including, sulphur oxides, hydrochloric acid or phosgene.

Special protective equipment for fire-fighters

Full protective clothing and self-contained breathing apparatus.

Specific Methods

Do not allow washings to reach sewage or effluent systems.

Keep up wind.

Specific hazards arising from the chemical

This product will burn if exposed to fire.

Hazchem Code

3Z

Decomposition Temperature

Information is not available.

Precautions in connection with fire

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

Other Information

Location Certificate: Not applicable

Hazardous Atmosphere Zone: Not applicable

Number of Fire Extinguishers: Not applicable

Section 6 - Accidental Release Measures

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Increase ventilation. If possible contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Spills and 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.

Section 7 - Handling and Storage

Precautions for Safe Handling

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. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene by washing hands prior to eating, drinking, smoking or using toilet facilities.

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.

Conditions for safe storage, including any incompatibilities

Keep out of reach of children.

Store locked up. 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 100 litres of Avadex Xtra require secondary containment and signage and more than 100 litres require emergency response plans.

Stores containing 500 litres or more must have at least 2 fire extinguishers.

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.

Section 8 - Exposure Controls and Personal Protection

Occupational Exposure Limits (OEL)

No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.

Biological Limit Values

No biological limits allocated.

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.

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

Do not use, pour, spill or store near heat or flame.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used.

Hand Protection

Wear gloves of impervious material such as elbow-length chemical resistant gloves.

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.

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used.

Do not handle until all safety precautions have been read and understood.

Avoid skin and eye contact and inhalation of spray mist.

When mixing or applying wear eye protection, waterproof gloves, overalls and boots.

Do not eat, drink or smoke while using this product.

Wash splashes of concentrate off skin immediately. Wash hands and face thoroughly after handling.

Wash protective clothing daily after work.

Contaminated clothing should not be allowed out of the workplace.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

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.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Liquid	Appearance	Amber to brown liquid.
Odour	Typical solvent odour.	Decomposition Temperature	Information is not available.
Melting Point	29-30°C for active ingredient tri-allate.	Boiling Point	160°C
Solubility in Water	Forms an emulsion in water.	Specific Gravity	1.051
pH	5.0-7.3	Vapour Pressure	16mPa (25°C) for active ingredient tri-allate.
Vapour Density (Air=1)	> air	Odour Threshold	Information is not available.
Volatile Component	45% (solvent)	Partition Coefficient: n-octanol/water	Kow logP = 4.6 for active ingredient tri-allate.
Flash Point	>71°C	Flammability	Combustible.
Auto-Ignition Temperature	Information is not available.	Flammable Limits - Lower	Information is not available.

Properties	Description	Properties	Description
Flammable Limits - Upper	Information is not available.	Kinematic Viscosity	Information is not available.
Particle Characteristics	Information is not available.		

Other Information

(EC) Emulsifiable concentrate

Section 10 - Stability and Reactivity

Reactivity

Reacts with incompatible materials.

Chemical Stability

Stable under normal conditions of handling and storage.

Conditions to Avoid

Heat, open flames and other sources of ignition.

Incompatible Materials

Avoid contact of the concentrate with strong acids and bases.

Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including, sulphur oxides, hydrochloric acid or phosgene.

Possibility of hazardous reactions

Reacts with incompatible materials.

Hazardous Polymerization

Hazardous polymerization is not possible.

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.

Section 11 - Toxicological Information

Toxicology Information

No toxicity data available for this material. The available acute toxicity data for the ingredient/s and a similar formulation is/are given below.

Acute Toxicity - Oral

Similar formulation

LD50 (rat): >2000 mg/kg

Acute Toxicity - Inhalation

LC50 (rat): >5.3 mg/l/4h for active ingredient tri-allate.

Acute Toxicity - Dermal

Similar formulation

LD50 (rat): >5000 mg/kg

Ingestion

May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects. May cause irritation to the mucous membrane and upper airways, especially where vapours or mists are generated. Symptoms include sneezing, coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea and vomiting.

Skin Corrosion/Irritation

This product causes skin irritation. The symptoms may include redness, itching and swelling. Repeated exposure may cause skin dryness, defatting of the skin and cracking and may lead to dermatitis. May cause an allergic skin reaction.

Serious Eye Damage/Irritation

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Skin Sensitisation

This product may cause an allergic skin reaction.

Germ Cell Mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Suspected of causing cancer. Classified as a suspected human carcinogen.

Mineral oils highly refined are listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT - Single Exposure

Not considered to be toxic to reproduction.

STOT - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Chronic Effects

Evidence from animal studies indicate that repeated or prolonged exposure to triallate can result in neurological effects.

Liver and kidney damage has been noted in laboratory animals that have been fed excessive doses of triallate.

Other Information

The Australian Acceptable Daily Intake (ADI) for Triallate for a human is 0.005 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.5 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: Aust Govt Dept. of APVMA, "ADI List", Edition 2/2026).

Section 12 - Ecological Information

Ecological Information

Very toxic to aquatic life with long lasting effects.

No ecological data available for this material. The available ecological data for the ingredients is given below:

Persistence and degradability

Under prolonged and extremely dry conditions, this product may persist for several months.

Bioaccumulative Potential

Tri-allate bioaccumulates in fish, Kow logP = 4.6.

Acute Toxicity - Fish

LC50 (96hr) Rainbow trout 1.2mg/L for active ingredient tri-allate.

Acute Toxicity - Daphnia

LC50 (48hr) 0.43mg/L for active ingredient tri-allate.

Acute Toxicity - Algae

EC50 (96hr) Selenastrum capricornutum 0.12mg/L for active ingredient tri-allate.

Acute Toxicity - Other Organisms

Birds: LD50 (oral) Bobwhite quail >2251mg/kg for active ingredient tri-allate.

Non-toxic to bees for active ingredient tri-allate.

Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

Section 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.

Section 14 - Transport Information

Transport Information

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

UN Number

3082

Proper Shipping Name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(tri-allylate)

Hazard Class

9

Hazchem Code

3Z

Packaging Method

-

Packing Group

III

EPG Number

-

ANZ-ERG Guide Number

47

Hazchem Code

3Z

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.

Section 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 HSR101598

See www.epa.govt.nz for approval controls.

Packaging and Labelling

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Section 16 - Any Other Relevant Information

Date of preparation or last revision of SDS

SDS Revised: July 2026

Supersedes: October 2024

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

SDS updated to reflect the latest technical information available for this product.

END OF SDS

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