

Infosafe No™ NU0GX      Issue Date : November 2016      ISSUED by NUFARM

Product Name **AVADEX XTRA Selective Herbicide**

Classified as hazardous

## 1. Identification

**GHS Product Identifier** AVADEX XTRA Selective Herbicide

**Product Code** 0782      NUL3191

**Product Type** Group J Herbicide

**Company Name** NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)

**Address** 103-105 Pipe Road Laverton North  
Victoria 3026 Australia

**Telephone/Fax Number** Tel: +61 3 9282-1000  
Fax: +61 3 9282-1001

**Emergency phone number** 1800 033 498 (24hr Australia)

**Recommended use of the chemical and restrictions on use** For the control of Wild oats in Wheat, Triticale, Barley, Chickpeas, Peas, Lupins, Faba beans Linseed, Canola and Safflower and for use in mixtures with TriflurX for control of a range of grass and broadleaf weeds in no-till/min-till cropping systems, pre-sowing or incorporated by sowing (IBS) as per the Directions for Use table on the label.

**Other Information** This Safety Data Sheet describes the properties of the concentrated product. The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application.

## 2. Hazard Identification

**GHS classification of the substance/mixture** CA2 Carcinogenicity: Category 2  
AH1 Aspiration Hazard: Category 1  
RE2 STOT Repeated Exposure Category 2  
ED2A Eye Damage/Irritation: Category 2A  
SS-1 Sensitization - Skin: Category 1  
SE-3NARC STOT Single Exposure Category 3 (narcotic)  
FL4 Flammable Liquids: Category 4  
AC1 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1

**Signal Word (s)** DANGER

**Hazard Statement (s)** H351 Suspected of causing cancer.  
H304 May be fatal if swallowed and enters airways.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
AUH066 Repeated exposure may cause skin dryness or cracking.  
H336 May cause drowsiness or dizziness.  
H227 Combustible liquid  
H410 Very toxic to aquatic life with long lasting effects.  
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.

**General Precautionary Statement (s)** Health hazard, Exclamation mark, Environment,  
The below pictograms are GHS Hazard symbols for workplace use only.  
See SECTION 14 for Dangerous Goods information.



**Precautionary statement – Prevention** P202 Do not handle until all safety precautions have been read and understood.  
P264 Wash hands and exposed skin thoroughly after handling.  
P280 Wear protective gloves, clothing, eye and face protection.  
P260 Do not breathe the mist/vapours/spray.

**Precautionary statement – Response** P308+P313 IF exposed or concerned: Get medical advice/attention.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P331 Do NOT induce vomiting.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P337+P313 If eye irritation persists: Get medical advice/attention.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P363 Wash contaminated clothing before reuse.  
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Poisons Schedule S5

**Other Information**

### 3. Composition/information on ingredients

<b>Chemical Characterization</b>	Liquid		
<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Tri-allate	2303-17-5	500 g/L
	Liquid Hydrocarbon	64742-94-5	471 g/L
	Surfactant		0-10 %

### 4. First-aid measures

<b>Inhalation</b>	Remove affected person to fresh air until recovered.
<b>Ingestion</b>	Rinse mouth and then drink plenty of water. Do not give anything by mouth to a semi-conscious or unconscious person. If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.
<b>Skin</b>	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
<b>Eye contact</b>	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice.
<b>First Aid Facilities</b>	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
<b>Advice to Doctor</b>	Treat symptomatically. If vomiting occurs, solvent present may cause pulmonary pneumonitis.

### 5. Fire-fighting 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 sulphur oxides, hydrochloric acid or phosgene if involved in fires or exposed to extreme heat.
<b>Special Protective Equipment for fire fighters</b>	Breathable air apparatus must be worn when fighting a fire in which this product is involved.
<b>Other Information</b>	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

### 6. Accidental release measures

<b>Spills &amp; Disposal</b>	Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal. On-site disposal of concentrate is not acceptable.
<b>Personal Protection</b>	For appropriate personal protective equipment (PPE), refer Section 8.
<b>Clean-up Methods - Large Spillages</b>	If large liquid spills occur, attempt to recover as much spilt material from sumps and bunded areas, as possible, before absorbing remaining material into vermiculite or other absorbent. Place damaged containers in recovery bins (if available) and return to manufacturer.
<b>Environmental Precautions</b>	This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

### 7. Handling and storage

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**Conditions for safe storage, including any incompatibilities** Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.

**Other Information** Always read the label and any attached leaflet before use.

## 8. Exposure controls/personal protection

**Occupational exposure limit values** No exposure standards have been set for this product or the active ingredients.  
 The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m<sup>3</sup>; 17ppm TWA, as total hydrocarbon.

**Appropriate engineering controls** Handle in well ventilated areas, generally natural ventilation is adequate.

**Personal Protective Equipment** When opening the container, preparing product for use and using the prepared product, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length chemical resistant gloves, goggles and a half face piece respirator. Re-entry period: Do not enter treated area until spray has dried. See label for detailed information on re-entry and re-handling.

**Hygiene Measures** After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

After each day's use, wash contaminated clothing and safety equipment.

**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.

## 9. Physical and chemical properties

**Form** Liquid

**Appearance** Amber to brown coloured liquid.

**Odour** Typical solvent odour.

**Boiling Point** 160°C

**Solubility in Water** Forms an emulsion in water.

**Specific Gravity** 1.053

**pH** 8 - 8.5 (1% solution)

**Vapour Pressure** 16 mPa @ 25°C for triallate

**Volatile Component** 45% (solvent)

**Partition Coefficient: n-octanol/water** Kow Log P is 4.6

**Flash Point** 69.5°C

**Flammability** Combustible liquid C1.

## 10. Stability and reactivity

**Chemical Stability** Stable under normal conditions.

**Incompatible Materials** Avoid contact of the concentrate with strong acids and bases.

**Possibility of hazardous reactions** Keep away from strong oxidising agents.

**Hazardous Polymerization** Hazardous polymerisation is not possible.

## 11. Toxicological Information

**Acute Toxicity - Oral** LD50 (rat) >2000 mg/kg for a similar formulation

**Acute Toxicity - Dermal** LD50 (rat) >5000 mg/kg for a similar formulation

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<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) >5.3 mg/l for triallate
<b>Ingestion</b>	Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.
<b>Inhalation</b>	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.
<b>Skin</b>	Will irritate the skin. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis. May cause sensitisation by prolonged skin contact.
<b>Eye</b>	The concentrate will cause irritation of the eyes.
<b>Carcinogenicity</b>	Data indicates no carcinogenic effects.
<b>Reproductive Toxicity</b>	No such effects have been observed in the absence of maternal toxicity.
<b>Chronic Effects</b>	Liver and kidney damage has been noted in laboratory animals that have been fed excessive doses of triallate. Evidence from animal studies indicate that repeated or prolonged exposure to triallate can result in neurological effects.
<b>Serious eye damage/irritation</b>	The product is an eye irritant.
<b>Skin corrosion/irritation</b>	The product is a skin irritant.
<b>Other Information</b>	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 Health, Office of Chemical Safety, 'ADI List', December 2015).

## 12. Ecological information

<b>Persistence and degradability</b>	Under prolonged and extremely dry conditions, this product may persist for several months.
<b>Known Harmful Effects on the Environment</b>	The product is a marine pollutant for sea transport.
<b>Other Precautions</b>	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product. Spray drift can cause damage, read the label for more information.
<b>Environmental Protection</b>	
<b>Acute Toxicity - Fish</b>	The following is data for the active ingredient, triallate. LC50 (96hr) for rainbow trout is 1.2 mg/l. LC50 (96hr) for bluegill sunfish is 1.3 mg/l.
<b>Acute Toxicity - Daphnia</b>	EC50 (48hr) for daphnia is 0.43 mg/l for triallate.
<b>Acute Toxicity - Algae</b>	LC50 (96 hr) for Selenastrum Capricornutum 0.12 mg/l.
<b>Acute Toxicity - Other Organisms</b>	Birds: Not toxic to birds. LD50 for bobwhite quail is >2251 mg/kg Not toxic to bees.

## 13. Disposal considerations

<b>Product Disposal</b>	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®).
<b>Container Disposal</b>	Do not use this container for any other purpose. Triple or preferably pressure rinse containers before disposal. Add rinsings to the spray tank. If recycling, replace cap and return clean containers to recycler or designated collection point.

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If not recycling, puncture or shred and bury containers in local authority landfill.

If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

Empty containers and product should not be burnt.

drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.

Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage.

## 14. Transport information

**Storage and Transport** Considered non dangerous for road and rail transport (in packaging, including IBCs not greater than 3000 Lt each) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.

**UN Number (Sea Transport)** For bulk shipments as Class 9, use UN 3082, HazChem code 2X.  
3082

**IMO Class/Packing Group** Class 9; Packing Group III

**IMO Marine Pollutant** Marine Pollutant

**IMO Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Contains Triallate)

## 15. Regulatory information

**Regulatory Information** WHS Schedule 11: item 10 - Flammable Liquid category 4 .

**Poisons Schedule** S5

**Packaging & Labelling** CAUTION  
KEEP OUT OF REACH OF CHILDREN  
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

**Other Information** This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 56598.

## 16. Other Information

**Date of preparation or last revision of SDS** Revised 04/11/2016  
This msds replaces document dated April 2016.

**Contact Person/Point** Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000  
After Hours: Shift Supervisor Phone: 1800 033 498

**Revisions Highlighted** The SDS was reviewed to include GHS requirements.

...End Of MSDS...

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