

Infosafe No™ NU0GX	Issue Date : June 2011	ISSUED by NUFARM
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Product Name **AVADEX XTRA Selective Herbicide**

Classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	AVADEX XTRA Selective Herbicide
Product Code	0782
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
Emergency Tel.	1800 033 498 (24hr Australia)
Telephone/Fax Number	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
Recommended Use	For the control of Wild oats in Wheat, Triticale, Chickpeas, Barley, Peas, Linseed, Lupins, Canola (Rapeseed), Faba beans 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 MSDS 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. HAZARDS IDENTIFICATION

Hazard Classification	Classified as hazardous HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.
Risk Phrase(s)	Classified as hazardous R36/38 Irritating to eyes and skin. R43 May cause sensitization by skin contact. R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed. R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness and cracking. R67 Vapours may cause drowsiness and dizziness
Safety Phrase(s)	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S46 If swallowed, seek medical advice immediately and show this container or label.
Other Information	Poisons Schedule S5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization	Liquid		
Ingredients	<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

Inhalation	Remove affected person to fresh air until recovered.
Ingestion	Rinse mouth and then drink plenty of water. Do not give anything by mouth to a semi-conscious or unconscious person.

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Skin	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.
Eye	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and laundry before re-use.
First Aid Facilities	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice.
Advice to Doctor	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26. Treat symptomatically. If vomiting occurs, solvent present may cause pulmonary pneumonitis.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	May emit toxic fumes of sulphur oxides, hydrochloric acid or phosgene if involved in fires or exposed to extreme heat.
Special Protective Equipment for fire fighters	Breathable air apparatus must be worn when fighting a fire in which this product is involved.
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	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.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Clean-up Methods - Large Spillages	If large liquid spills occur, attempt to recover as much spilt material from sumps and banded areas before absorbing remaining material into vermiculite or other absorbent. Place damaged containers in recovery bins (if available) and return to manufacturer.
Environmental Precautions	This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. HANDLING AND STORAGE

Conditions for Safe Storage	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

National Exposure Standards	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 ³ ; 17ppm TWA, as total hydrocarbon.
Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	When opening the container and preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.
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.

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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 Value	8 - 8.5 (1% solution)
Vapour Pressure	16 mPa @ 25°C for triallate
Volatile Component	45% (solvent)
Octanol/Water Partition Coefficient	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.
Hazardous Reactions	Keep away from strong oxidising agents.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

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.
Ingestion	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.
Skin	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.
Eye	The concentrate will cause irritation of the eyes.
Chronic Effects	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.
Reproductive Toxicity	No such effects have been observed in the absence of maternal toxicity.
Carcinogenicity	Data indicates no carcinogenic effects.
Acute Toxicity - Oral	LD50 (rat) >2000 mg/kg for a similar formulation
Acute Toxicity - Dermal	LD50 (rat) >5000 mg/kg for a similar formulation
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >5.3 mg/l for triallate
Eye Irritation	The product is an eye irritant.
Skin Irritation	The product is a skin irritant.
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

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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: Comm. Dept. of Health and Ageing Office of Chemical Safety and Environmental Health, 'ADI List', March 2010).

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

Product Disposal	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®).
Container Disposal	Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. 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. 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.

14. TRANSPORT INFORMATION

Transport Information	Not classified as Dangerous Goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
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 2Z. 3082
IMO Class/Packing Group	Class 9; Packing Group III
IMO Marine Pollutant	Marine Pollutant



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

15. REGULATORY INFORMATION

Poisons Schedule S5

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

Hazard Category Harmful, Irritant

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Date of preparation or last revision of MSDS Reviewed 28/06/2011

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

Revisions Highlighted The MSDS was reviewed. Minor changes were made to the information.
Product is now a Group J Herbicide.
...End Of MSDS...

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