

Infosafe No™ 3NUMC	Issue Date : May 2012	ISSUED by NUFARM
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Product Name **Amicide Advance 700 Selective Herbicide**

Classified as hazardous

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	Amicide Advance 700 Selective Herbicide
<b>Product Code</b>	0052
<b>Product Type</b>	Group I Herbicide
<b>Company Name</b>	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
<b>Address</b>	103-105 Pipe Road Laverton North Victoria 3026 Australia
<b>Emergency Tel.</b>	1800 033 498 (24hr Australia)
<b>Telephone/Fax Number</b>	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
<b>Recommended Use</b>	A non-volatile product for the control of broadleaved weeds in fallow before direct drilling or sowing of cereals and pastures; and in cereal crops, pastures, sugar cane, and in non-agricultural areas as per the Directions for Use table on the label.
<b>Other Information</b>	This is a PHENOXY HERBICIDE that can cause severe damage to susceptible crops such as cotton, grapes, tomatoes, oilseed crops and ornamentals. 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

<b>Hazard Classification</b>	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.
<b>Risk Phrase(s)</b>	Classified as hazardous R22 Harmful if swallowed. R41 Risk of serious damage to eyes. R43 May cause sensitization by skin contact.
<b>Safety Phrase(s)</b>	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children. S25 Avoid contact with eyes. 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.
<b>Other Information</b>	Poisons Schedule S6

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Chemical Characterization</b>	Liquid		
<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	2,4-D present as dimethylamine and monomethylamine salts	94-75-7	700 g/L
	Water		10-30 %

## 4. FIRST AID MEASURES

<b>Inhalation</b>	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice immediately.
<b>Ingestion</b>	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

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placement of the patient.

The above first aid instructions are mandated by the Commonwealth Department of Health and Ageing via the National Drugs and Poisons Schedule. These instructions are suitable for ingestion of spray solution and small amounts of concentrate; however, if SUBSTANTIAL AMOUNTS of the concentrate have been swallowed (more than about one tablespoon) AND if medical assistance is more than 30 minutes away, the induction of vomiting should be CONSIDERED, preferably based on MEDICAL ADVICE if a physician can be contacted by phone. All care must be taken to prevent vomit from being inhaled. Do not give anything by mouth to a semi-conscious or unconscious person.

**Skin** If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water.

**Eye** Remove contaminated clothing and launder before re-use.  
If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.

**First Aid Facilities** If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

**Advice to Doctor** Treat symptomatically.  
No specific antidote.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media** If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.

**Hazards from Combustion Products** Non-combustible.  
May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.

**Special Protective Equipment for fire fighters** Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.

**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 in sealed open top containers for disposal.

On-site disposal of concentrate is not acceptable.  
Dispose of at a landfill in accordance with local regulations.

**Personal Protection** For appropriate personal protective equipment (PPE), refer Section 8.

**Clean-up Methods - Large Spillages** Place damaged containers in recovery bins (if available) and return to manufacturer.

**Environmental Precautions** Prevent from entering drains, waterways or sewers.

This product is a herbicide and spills can damage crops, pastures and desirable vegetation.  
Use earthen bunds or absorbent bunding to prevent spreading of spillage.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling** Do NOT spray in high winds.  
Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.

No special precautions are necessary when handling sealed containers.  
For personal protective equipment (PPE) and hygiene advice, refer Section 8.

**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.

Do not store near oxidisers.  
Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

**Tank Cleaning** See label for detailed information on cleaning of spray equipment.  
Equipment that has been used for this chemical should not be used for the application of other materials to sensitive plants, unless it has been well washed out with hot soapy water or 1% solution of ammonia, followed by several clear water rinses.

**Other Information** Do not use on or in situations where damage to susceptible crops or plants such as cotton, tobacco, tomatoes, flowers, vines, fruit trees or other

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susceptible crop plants may result from direct application or drift.  
Always read the label and any attached leaflet before use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>National Exposure Standards</b>	No exposure standard for this product has been set, however, an exposure standard has been set for 2,4-D acid (solid) at 10 mg/m <sup>3</sup> .
<b>Engineering Controls</b>	Handle in well ventilated areas, generally natural ventilation is adequate.
<b>Respiratory Protection</b>	Do not inhale spray mist.
<b>Personal Protective Equipment</b>	When preparing spray, wear PVC or rubber apron, elbow length PVC gloves and face shield. When using the prepared spray, wear face shield.
<b>Hygiene Measures</b>	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.
<b>Requirements Concerning Special Training</b>	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

<b>Form</b>	Liquid
<b>Appearance</b>	Clear, brown liquid.
<b>Odour</b>	Fish like odour.
<b>Melting Point</b>	<0°C
<b>Boiling Point</b>	100°C
<b>Solubility in Water</b>	Soluble in water.
<b>Specific Gravity</b>	1.24
<b>pH Value</b>	9 - 10 (1% solution)
<b>Vapour Pressure</b>	2,4-D salts are non-volatile
<b>Volatile Component</b>	20% (water)
<b>Flammability</b>	Non combustible material.
<b>Other Information</b>	pKa is 2.73 for 2,4-D

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under normal conditions.
<b>Incompatible Materials</b>	Reaction of the concentrate or spray mix with acids will precipitate solid 2,4-D acid and largely de-activate the product and cause blockages in spray equipment. The addition of a strong alkali such as caustic soda will cause release of dimethylamine and monomethylamine vapour.
<b>Hazardous Polymerization</b>	Hazardous polymerisation is not possible.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicology Information</b>	No harmful effects are expected if the precautions on the label and this MSDS are followed.
<b>Inhalation</b>	The components of the product are of low volatility and no adverse effects are expected from handling the concentrate. The concentrate is considered harmful by inhalation by Worksafe Australia. A moderate hazard exists from inhalation of spray and care should be taken to avoid inhalation of spray mists.
<b>Ingestion</b>	Not a likely route of exposure. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury.

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<b>Skin</b>	Ingestion of the product in relatively large amounts can result in headache, nausea, lethargy, motor weakness and incoordination. Prolonged contact with the concentrate may cause irritation. Prolonged contact of the concentrate with skin will result in absorption of some 2,4-D which can be harmful.
<b>Eye</b>	The concentrate will cause irritation of the eyes. Prolonged contact with the concentrate may cause damage to the eye.
<b>Chronic Effects</b>	Chronic Overexposure: Repeated absorption of relatively large amounts of 2,4-D presents a risk to the liver and kidneys.
<b>Acute Toxicity - Oral</b>	LD50 (rat) greater than 300 mg/kg and less than 2000 mg/kg
<b>Acute Toxicity - Dermal</b>	LD50 (rabbit) >2000 mg/kg
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) >5.15 mg/l (aerosol)
<b>Eye Irritation</b>	The product is a severe eye irritant.
<b>Skin Irritation</b>	Mild irritant
<b>Skin Sensitisation</b>	The product is a skin sensitiser.
<b>Other Information</b>	In trials using 2,4-D as a drug, studies on volunteers have shown that doses of between 5 and 36 mg/kg body weight do not cause any acute toxic effects. Formulated 2,4-D products can be absorbed by ingestion, inhalation (spray mist) and through the skin. Studies of users (sprayers) has shown that absorption through the skin is the most common route. When used with good agricultural spraying practice and good personal hygiene, absorption of 2,4-D is very low. 2,4-D does not accumulate in the body; a single dose of 2,4-D is rapidly excreted (in a few days), mainly in the urine. The Australian Acceptable Daily Intake (ADI) for 2,4-D for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1.0 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', December 2011).

## 12. ECOLOGICAL INFORMATION

<b>Persistence / Degradability</b>	Half life in soil is typically 7 days. Loss from soil is principally by microbial degradation.
<b>Mobility</b>	Rapid degradation in soil prevents significant downward movement under normal conditions.
<b>Known Harmful Effects on the Environment</b>	2,4-D products do not appear to pose any threat to birds. 2,4-D products do not appear to pose any threat to fish or other aquatic organisms other than in very high concentrations.
<b>Other Precautions</b>	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
<b>Environ. Protection</b>	Spray drift can cause damage, read the label for more information.
<b>Acute Toxicity - Fish</b>	LC50 (96hr) for rainbow trout is ~100 mg/l.
<b>Acute Toxicity - Daphnia</b>	LC50 (48hr) for 2,4-D amines is 184 mg/l.
<b>Acute Toxicity - Other Organisms</b>	Birds: Not toxic to birds. LD50 for bobwhite quail is 500 mg/kg Bees: Not toxic to bees. LD50 94 µg/bee.
<b>Sewage Treatment</b>	Not inhibitory in sewage system, 2,4-D is rapidly biodegraded.

## 13. DISPOSAL CONSIDERATIONS

<b>Product Disposal</b>	DO NOT dispose of undiluted chemicals on site. 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 inner bladder or 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, break, crush or puncture and deliver empty packaging for appropriate disposal at an approved waste management facility.  
 If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government 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.  
 QuikPour containers: DO NOT separate inner bladder from outer carton. Single rinse and add rinsings to the spray tank. Puncture outer carton and bladder. Follow recycling instructions for other containers as per the label. DO NOT burn empty containers or product.

#### 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>Storage and Transport</b>	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

#### 15. REGULATORY INFORMATION

<b>Poisons Schedule</b>	S6
<b>Packaging &amp; Labelling</b>	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Hazard Category</b>	Harmful, Irritant
<b>Other Information</b>	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 66167.

#### 16. OTHER INFORMATION

<b>Date of preparation or last revision of MSDS</b>	Revised 08/05/2012 This SDS replaces document dated February 2012.
<b>Contact Person/Point</b>	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
<b>Revisions Highlighted</b>	The SDS was reviewed. Minor changes were made to the information. See sections 9 - pH value included.. ...End Of MSDS...

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