



Material Safety Data Sheet

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Infosafe No. 3NU3A Issue Date: June 2004 ISSUED by NUFARM

Product Name : SPINNAKER ® 700 WDG Herbicide

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name SPINNAKER ® 700 WDG Herbicide
Product Code 0758
Product Use For the pre- or post-emergence control of certain weeds in Centrosema (Cavalcade), chickpeas, faba beans, field peas, lucerne, mung beans, peanuts, serradella, soybeans and subterranean clover as per the Directions for Use table.
Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Emergency Tel. 24hr 1800 033 498
Telephone/Telex Number Tel: (03) 9282-1000 Fax: (03) 9282-1001
Product Type Group B Herbicide
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. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Solid

Ingredients	Name	CAS	Proportion
	Dispersants		to 100%
	Imazethapyr	81335-77-5	700 g/Kg

3. HAZARDS IDENTIFICATION

Irritating to eyes.
Other Information Poisons Schedule 5

4. FIRST AID MEASURES

Inhalation Over-exposure by inhalation is improbable. Check for other causes of observed symptoms and seek medical advice.
Ingestion 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.
Skin If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water.
Eye If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media Water fog, foam, carbon dioxide or dry chemical.
Avoid using large volumes of water which would spread the product.
Avoid direct water jets; airborne dusts may create an explosion hazard.
Hazardous Combustion Products If involved in a major fire, could evolve oxides of carbon or nitrogen.
Protective Equipment Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.

6. ACCIDENTAL RELEASE MEASURES



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Spills & Disposal Recover the product by sweeping up or vacuuming without raising dust.
Pick up with a shovel and broom.
Collect spilled material and waste in sealable open-top type containers for disposal.

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

Environmental Prevent from entering drains, waterways or sewers.

Precautions

7. HANDLING AND STORAGE

Handling Avoid generating dusts while handling the product and mixing.
Do not mix, store or apply the product or spray solutions of the product in aluminium, galvanised steel or unlined steel containers or spray tanks.

Storage Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight.
Keep away from sources of ignition and protect from exposure to fire and heat.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits No exposure standards have been set for this product or the active ingredients.

Respiratory Protection If dusts are present, wear a class P1 dust mask.

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles.

Eng. Controls Use in a well ventilated area only.
Avoid generating and inhaling dusts.
Beware of dust explosions - do not allow dust to accumulate in ventilation systems.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Tan granules

Odour Faint rubbery odour

Solubility in Water Disperses in water.

pH Value 3.46 (2% aqueous solution)

Partition co-efficient, n-octanol/water Kow Log P is 1.04 at pH5; 1.49 at pH7 and 1.20 at pH9

Flammability Danger of dust explosion.

Other Information pKa is 3.9

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Hazardous Polymerization Hazardous polymerisation is not possible.

Materials to Avoid Do not mix, store or apply the product or spray solutions of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.
No compatible with aluminium.

Hazardous Reaction Keep away from strong oxidising agents.

11. TOXICOLOGICAL INFORMATION

Toxicology Information No harmful effects are expected if the precautions on the label and this MSDS are followed.

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Inhalation	The components of the product are of low volatility and no adverse effects are expected from handling the concentrate.
Ingestion	The concentrate is of low toxicity if swallowed.
Skin	Prolonged contact with the concentrate may cause irritation.
Eye	The concentrate will cause irritation of the eyes.
Chronic Effects	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Reproductive Toxicity	Data indicates no reproductive effects.
Mutagenicity	Data indicates no mutagenic effects.
Carcinogenicity	Data indicates no carcinogenic effects.
Acute Toxicity - Oral	LD50 (rat) >5000 mg/kg for imazethapyr
Acute Toxicity - Dermal	LD50 (rat) >5000 mg/kg for imazethapyr
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >6.8 mg/l for imazethapyr
Eye Irritation	The product is an eye irritant.
Skin Irritation	Not a skin irritant.
Skin Sensitisation	Product is not a skin sensitiser.
Other Information	The Australian Acceptable Daily Intake (ADI) for imazethapyr for a human is 2.8 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 276 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, 'ADI List', TGA, August 2003).

12. ECOLOGICAL INFORMATION

Other Precautions	Do not contaminate dams, waterways or sewers with this product.
Acute Toxicity - Fish	The following is data for the active ingredient, imazethapyr. Not toxic to fish. LC50 (96 hr) for rainbow trout is 340 mg/l. LC50 (96 hr) for bluegill sunfish is 420 mg/l. LC50 (96 hr) for channel catfish is 240 mg/l.
Acute Toxicity - Daphnia	EC50 (48hr) is >1000 mg/l.
Acute Toxicity - Other Organisms	Birds: Not toxic to birds. LD50 for quail is >2150 mg/kg Bees: Not toxic to bees. LD50 >100 µg/bee.

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 (ChemCollect).
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. If on-site container disposal is necessary, triple rinse empty container with water, add rinsate to the spray tank. Puncture top, sides and bottom, crush and bury in an approved landfill or bury with at least 500 mm of soil cover away from pasture and crop areas, water supplies and houses. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

U.N. Number	None Allocated
DG Class	None Allocated
Hazchem Code	None Allocated



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Packing Group None Allocated

Storage and Transport Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

Risk Phrase R36 Irritating to eyes.

Safety Phrase 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.

S46 If swallowed, seek medical advice immediately and show this container or label.

Poisons Schedule S5

Hazard Category Irritant

Packaging & CAUTION

Labelling KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

16. OTHER INFORMATION

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Contact Person/Point Normal Hours: Mr Volker Maier Phone: (03) 9282 1000

After Hours: Shift Supervisor Phone: 1800 033 498

References Handbook of Pesticide Toxicology, vol.2

Revisions Highlighted First Issue

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