

Infosafe No™ 3NUGN	Issue Date : May 2014	ISSUED by NUFARM
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 Product Name **GRUNT 750 WDG Herbicide**

Classified as hazardous

## 1. Identification

<b>GHS Product Identifier</b>	GRUNT 750 WDG Herbicide
<b>Product Code</b>	0930
<b>Product Type</b>	Group C 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>Telephone/Fax Number</b>	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
<b>Emergency phone number</b>	1800 033 498 (24hr Australia)
<b>Recommended use of the chemical and restrictions on use</b>	For the control of certain sedges, annual and perennial grasses, broadleaf and woody weeds in Pinus radiata and Pinus pinaster, forests, and industrial weed control situations as per the Directions for Use table on the label.
<b>Other Information</b>	This Safety Data Sheet 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. Hazard Identification

<b>GHS classification of the substance/mixture</b>	OT4 Acute Toxicity - Oral: Category 4 ED2A Eye Damage/Irritation: Category 2A
<b>Signal Word (s)</b>	WARNING
<b>Hazard Statement (s)</b>	H302 Harmful if swallowed. H319 Causes serious eye irritation.
<b>General Precautionary Statement (s)</b>	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.
<b>Pictogram (s)</b>	Exclamation mark



<b>Precautionary statement – Prevention</b>	P264 Wash hands and exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves, clothing, eye and face protection.
<b>Precautionary statement – Response</b>	P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth. 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.
<b>Other Information</b>	Poisons Schedule S6

## 3. Composition/information on ingredients

<b>Chemical Characterization</b>	Solid		
<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Hexazinone tech.	51235-04-2	750 g/kg
	Kaolin clay	1332-58-7	10-30 %
	Anionic Components		<10%

## 4. First-aid measures

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<b>Inhalation</b>	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
<b>Ingestion</b>	Rinse mouth and then drink plenty of water. If vomiting occurs, give more water to drink to assist dilution. 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 laundry 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 immediately.
<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.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog, foam, carbon dioxide or dry chemical.
<b>Hazards from Combustion Products</b>	If involved in a fire, it may emit oxides of nitrogen and possibly cyanide.
<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>	Recover the product by sweeping up or vacuuming without raising dust. 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.

## 7. Handling and storage

<b>Precautions for Safe Handling</b>	Avoid generating dusts while handling the product and mixing. Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers. If dusts are generated, it is advisable to wear a dust mask, refer Section 8.
<b>Conditions for safe storage, including any incompatibilities</b>	Do not apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Store in the closed, original container in a dry, well ventilated area out of direct sunlight.
<b>Tank Cleaning</b>	Thoroughly flush all spray equipment with water following the use of this product and before use with other products.
<b>Other Information</b>	Always read the label and any attached leaflet before use.

## 8. Exposure controls/personal protection

Occupational exposure limit values	<u>Name</u>	STEL		TWA		<u>Footnote</u>
		<u>mg/m3</u>	<u>ppm</u>	<u>mg/m3</u>	<u>ppm</u>	
<b>Appropriate engineering controls</b>	Kaolin clay			10		
	Handle in well ventilated areas, generally natural ventilation is adequate.					

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<b>Respiratory Protection</b>	If dusts are present, wear a class P1 dust mask.
<b>Personal Protective Equipment</b>	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.
<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>	Solid
<b>Appearance</b>	Beige Granules
<b>Solubility in Water</b>	Disperses in water.
<b>Vapour Pressure</b>	0.03 mPa (hexazinone)
<b>Partition Coefficient: n-octanol/water</b>	Kow Log P is 1.2 (hexazinone, pH7)
<b>Flammability</b>	Non combustible material.
<b>Other Information</b>	pKa is 2.2 (hexazinone, 25°C)

## 10. Stability and reactivity

<b>Chemical Stability</b>	Stable under normal conditions.
<b>Hazardous Polymerization</b>	Hazardous polymerisation is not possible.

## 11. Toxicological Information

<b>Acute Toxicity - Oral</b>	LD50 (rat) 1100 mg/kg for hexazinone
<b>Acute Toxicity - Dermal</b>	LD50 (rat) >5000 mg/kg for hexazinone
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (1hr) >7.48 mg/l for hexazinone
<b>Ingestion</b>	Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.
<b>Inhalation</b>	May cause irritation to mucous membranes.
<b>Skin</b>	May irritate the skin.
<b>Eye</b>	The concentrate will cause irritation of the eyes.
<b>Skin Sensitisation</b>	Product is not a skin sensitiser.
<b>Reproductive Toxicity</b>	Data indicates no reproductive effects. Data indicates no teratogenic effects.
<b>Serious eye damage/irritation</b>	Moderate eye irritant.
<b>Mutagenicity</b>	Data indicates no mutagenic effects.
<b>Skin corrosion/irritation</b>	Mild skin irritant.
<b>Other Information</b>	The Australian Acceptable Daily Intake (ADI) for hexazinone for a human is 0.1 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 10 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, 'ADI List', September 2013).

## 12. Ecological information

<b>Other Precautions</b>	Do not contaminate dams, waterways or sewers with this product or the
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<b>Environmental Protection</b>	containers which have held this product. Spray drift can cause damage, read the label for more information.
<b>Acute Toxicity - Fish</b>	LC50 (96hr) for rainbow trout is >320 mg/l for hexazinone
<b>Acute Toxicity - Daphnia</b>	LC50 (48hr) for daphnia is 442 mg/l.
<b>Acute Toxicity - Algae</b>	EC50 (120hr) for Selenastrum capricornutum 0.007 mg/l for hexazinone.
<b>Acute Toxicity - Other Organisms</b>	Not toxic to birds. LD50 for bobwhite quail is 2258 mg/kg for hexazinone Bees: Not toxic to bees. LD50 >60 µg/bee.

### 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. Puncture or shred 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. DO NOT burn empty bags or product.

### 14. Transport information

<b>Storage and Transport</b>	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail. For bulk shipments as Class 9, use UN 3077, HazChem code 2X.
<b>UN Number (Sea Transport)</b>	3077
<b>IMO Class/Packing Group</b>	Class 9; Packing Group III
<b>IMO Marine Pollutant</b>	Marine Pollutant
<b>IMO Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains hexazinone)

### 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>Other Information</b>	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 62549.

### 16. Other Information

<b>Date of preparation or last revision of SDS</b>	12/05/2014 This MSDS replaces document dated May 2013.
<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 to include GHS requirements.  ...End Of MSDS...



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