

Infosafe No™ 3NUU2	Issue Date : April 2015	ISSUED by NUFARMNZ
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 Product Name **DRAGON® 700WG**

## 1. Identification

<b>GHS Product Identifier</b>	DRAGON® 700WG
<b>Product Code</b>	02968
<b>Product Type</b>	Fungicide
<b>Company Name</b>	Nufarm NZ
<b>Address</b>	6 Manu Street, Otahuhu Auckland 2024 New Zealand
<b>Telephone/Fax Number</b>	Tel: 0-9-270 4150 Fax: 0-9-270 4159
<b>Emergency phone number</b>	0800 651 911
<b>Email</b>	info@nz.nufarm.com
<b>Recommended use of the chemical and restrictions on use</b>	A protectant fungicide for the control of black spot and glomerella in apples, black spot in pears and black spot and downy mildew in grapes.
<b>Other Information</b>	This SDS 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>Other Information</b>	6.1C acute toxicant, 6.3A skin irritant, 8.3A eye corrosive, 6.5B sensitiser, 6.9A target organ toxicant, 9.1A aquatic toxicant, 9.3B terrestrial vertebrate toxicant. TOXICITY May be harmful if swallowed, inhaled or absorbed through the skin. May cause mild skin irritation, or sensitisation from prolonged skin contact. May cause damage to kidneys, liver and blood from repeated oral exposure at high doses. CORROSIVE Danger- this product is corrosive and may cause eye damage. ECOTOXIC Very toxic to aquatic organisms with long lasting effects. Toxic to terrestrial vertebrates.
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## 3. Composition/information on ingredients

<b>Chemical Characterization</b>	Solid		
<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Dithianon	3347-22-6	700 g/kg
	Dispersants		10-30 %
	Siliceous mineral		10-30 %

## 4. First-aid measures

<b>First Aid Measures</b>	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
<b>Inhalation</b>	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
<b>Skin</b>	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.
<b>Eye contact</b>	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Remove contact lenses, if present and easy to do.

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**First Aid Facilities** Seek medical assistance even if there are no immediate symptoms. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

**Advice to Doctor** Treat symptomatically.

## 5. Fire-fighting measures

**Suitable extinguishing media** Water fog, foam, carbon dioxide or dry chemical. Avoid strong water jets-airborne dusts may form a flammable dust cloud.

**Hazards from Combustion Products** If involved in a major fire, could evolve oxides of carbon, nitrogen or sulphur.

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

**Specific Methods** Keep up wind. Do not allow washings to reach sewage or effluent systems. Keep containers cool with water spray.

**Specific hazards arising from the chemical** This product contains a high proportion of an organic solid. Large accumulations of dust and fines associated with industrial processing of bulk material may be a dust explosion hazard.

**Hazchem Code** 2Z

**Other Information** Location Certificate: Not applicable  
Hazardous Atmosphere Zone: Not applicable  
Number of Fire Extinguishers: Not applicable

## 6. Accidental release measures

**Spills & Disposal** Wear protective clothing. Clear area of unprotected personnel. Sweep up solids without generating dust (use water to dampen). Contain and absorb liquid spills with inert material and place in waste containers. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.

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

**Environmental Precautions** Prevent material from entering drains and waterways.

## 7. Handling and storage

**Precautions for Safe Handling** Avoid skin and eye contact and inhalation of spray mist. APPROVED HANDLER: This product must be under the personal control of an approved handler or secured. TRACKING: Location and movement of this product must be recorded at each stage of its lifecycle. RECORD KEEPING: Records of use as described in the NZS 8409 Management of Agrichemicals must be kept.

**Conditions for safe storage, including any incompatibilities** Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from sources of ignition and foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100kg of DRAGON 700WG are subject to signage, and more than 100kg require emergency response plans.

**Other Information** Always read the label and any attached leaflet before use. Aggregate Storage Volume Thresholds: When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

## 8. Exposure controls/personal protection

**Occupational exposure limit values** No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.

**Appropriate engineering controls** Handle in well ventilated areas, generally natural ventilation is adequate. Avoid generating and inhaling dusts. Local exhaust ventilation may be required in confined spaces.

**Personal Protective Equipment** When handling wear eye protection, water proof hat, impervious gloves, boots, coat and trousers.

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<b>Hygiene Measures</b>	Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after use.
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## 9. Physical and chemical properties

<b>Form</b>	Solid
<b>Appearance</b>	Dark brown cyclindrical granules.
<b>Melting Point</b>	215-216°C for dithianon
<b>Solubility in Water</b>	Disperses in water.
<b>pH</b>	6.0-8.0 @ 1% dilution.
<b>Vapour Pressure</b>	2.7 x 10 <sup>-6</sup> mPa @ 25°C for dithianon
<b>Partition Coefficient: n-octanol/water</b>	Kow Log P is 3.2
<b>Flammability</b>	Not flammable. May form dust clouds.
<b>Other Information</b>	(WG) Water Dispersible Granule

## 10. Stability and reactivity

<b>Chemical Stability</b>	Stable under normal conditions of handling and storage.
<b>Conditions to Avoid</b>	Excessive heat and fire.
<b>Incompatible Materials</b>	Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime, lime sulfur and bordeaux mixtures.
<b>Hazardous Polymerization</b>	Hazardous polymerisation will not occur.

## 11. Toxicological Information

<b>Toxicology Information</b>	No harmful effects are expected if the precautions on the label and this SDS are followed.
<b>Acute Toxicity - Oral</b>	LD50 (rat) (female, male) = 273-520 mg/kg for the formulated product.
<b>Acute Toxicity - Dermal</b>	LD50 (rat) = >4000 mg/kg for the formulated product.
<b>Acute Toxicity - Inhalation</b>	LC50 (male rat) (4hr) = 0.28mg/l for dithianon.
<b>Ingestion</b>	Possible symptoms of exposure include: lethargy, shortness of breath, diarrhoea, motor weakness and incoordination.
<b>Inhalation</b>	Inhalation of dusts or aerosols may result in effects described under ingestion.
<b>Skin</b>	May irritate the skin. Prolonged or repeated exposure may cause skin sensitisation.
<b>Eye</b>	The concentrate will cause severe irritation and possible damage unless washed off immediately.
<b>Skin Sensitisation</b>	Product is a skin sensitiser.
<b>Carcinogenicity</b>	The weight of the evidence is that dithianon is not carcinogenic.
<b>Chronic Effects</b>	Target organ toxicant: Kidney, liver, blood and hematopoietic system.
<b>Serious eye damage/irritation</b>	Severe eye irritant
<b>Skin corrosion/irritation</b>	Not a skin irritant.
<b>Other Information</b>	The Australian Acceptable daily Intake (ADI) for dithianon for a human is 0.007 mg/kg bw set for public for daily lifetime exposure. This is based on the NOEL of 0.66 mg/kg bw, 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', June 2014)

## 12. Ecological information

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<b>Persistence and degradability</b>	Soil DT50 = 2.6-37.6 d for dithianon.
<b>Bioaccumulative Potential</b>	Does not bioaccumulate. Kow logP = 3.2 for dithianon
<b>Other Precautions</b>	Do not contaminate streams, rivers or waterways with the chemical or used containers. If climatic conditions, at the time of application, result in slow drying of the spray deposit, some varieties of fruit may show minor skin russeting.
<b>Basis for Assessment</b>	Ecotoxicological data have not been determined specifically for this product.
<b>Acute Toxicity - Fish</b>	LC50 (96hr) for rainbow trout is 0.016 mg/l for the formulated product.
<b>Acute Toxicity - Daphnia</b>	LC50 (48hr) for daphnia is 0.110 mg/l for the formulated product.
<b>Acute Toxicity - Algae</b>	EC50 for Selenastrum capricornutum for dithianon {72h} is 0.090 mg/l.
<b>Acute Toxicity - Other Organisms</b>	Bees: LD50= >100µg/bee (contact)for dithianon. Worms: LC50 (14d)= 578.4 mg/kg soil for dithianon LD50 for quail is 309 mg/kg b.w./day for dithianon.

### 13. Disposal considerations

<b>Product Disposal</b>	Dispose of product only by using according to the label, or at an approved landfill.
<b>Container Disposal</b>	Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

### 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>U.N. Number</b>	3077
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. - Contains Dithianon, 70%
<b>Transport hazard class(es)</b>	9
<b>Hazchem Code</b>	2Z
<b>Packaging Method</b>	-
<b>Packing Group</b>	III
<b>EPG Number</b>	-
<b>IERG Number</b>	47
<b>IMO Marine Pollutant</b>	Yes. Environmentally Hazardous Substance mark required.
<b>IMDG EMS</b>	F-A, S-F
<b>Other Information</b>	Do not carry this product on a passenger service vehicle. Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

### 15. Regulatory information

<b>National and or International Regulatory Information</b>	Registered pursuant to the ACVM Act 1997, No.P9078 See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration conditions. Approved pursuant to the HSNO Act 1996, Approval Code HSR007795. See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for approval controls.
<b>Hazard Rating Systems</b>	NFPA/HMIS:3-2-1
<b>Hazard Category</b>	TOXIC * CORROSIVE * ECOTOXIC - Keep out of reach of children

### 16. Other Information

<b>Date of preparation or last revision of SDS</b>	Not applicable. First Issue.
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# Safety Data Sheet

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**Contact Person/Point** IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE  
24Hr Tollfree Emergency No: 0800 651 911  
24Hr Emergency No: National Poisons Centre Phone: 0800 764 766  
...End Of MSDS...

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