

# Material Safety Data Sheet

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Infosafe No.	3NU4R	Issue Date : March 2006	ISSUED by CRPCARE
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Product Name : **Kumulus® DF Wettable Sulphur Fungicide Spray**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	Kumulus® DF Wettable Sulphur Fungicide Spray
<b>Product Code</b>	5175
<b>Product Type</b>	Group Y Fungicide
<b>Company Name</b>	Crop Care Australasia Pty Ltd (ABN 53 061 362 347)
<b>Address</b>	Unit 15/16 Metroplex Avenue Murarrie Queensland 4172 Australia
<b>Emergency Tel.</b>	1800 033 498
<b>Telephone/Fax Number</b>	Tel: (07) 3909 2000 Fax: (07) 3909 2010
<b>Recommended Use</b>	For the control of certain fungal diseases and mites in grapevines and other crops as per the Directions for Use table on the label.
<b>Other Information</b>	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>	NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.
<b>Other Information</b>	Poisons Schedule : Not Scheduled

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Chemical Characterization</b>	Solid		
<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Other non hazardous ingredients		10-30 %
	Sulphur	7704-34-9	800 g/Kg

## 4. FIRST AID MEASURES

<b>Inhalation</b>	Remove affected person to fresh air until recovered. If symptoms persist, seek medical advice immediately.
<b>Ingestion</b>	Rinse mouth and then drink plenty of water.
<b>Skin</b>	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use. If irritation persists, seek medical advice.
<b>Eye</b>	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice if irritation develops or persists.
<b>First Aid Facilities</b>	If poisoning occurs, contact a doctor or Poisons Information Centre on 13 11 26 (Australia).
<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>	Avoid strong water jets - airborne dusts may form a flammable dust cloud. If involved in a major fire, will evolve oxides of sulphur or carbon.
<b>Speical Protective Equipment for fire fighters</b>	Breathable air apparatus must be worn when fighting a fire in which this product is involved.

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**Hazchem Code** None Allocated  
**Other Information** Prevent fire water from entering drains or water bodies.

## 6. ACCIDENTAL RELEASE MEASURES

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

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling** 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.

**Conditions for Safe Storage** Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight.  
Keep bag sealed to prevent deterioration of product.

**Other Information** Always read the label and any attached leaflet before use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**National Exposure Standards** No biological exposure limit allocated.  
No exposure standards have been established for this product by Worksafe Australia, however, the TWA exposure standard for dusts not otherwise specified is 10 mg/m<sup>3</sup>.

**Engineering Controls** Handle in well ventilated areas, generally natural ventilation is adequate.

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

**Eye Protection** Wear basic eye protection.

**Personal Protective Equipment** It is good practice to wear suitable personal protective equipment (PPE).  
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 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** NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials. By 1st September, 2005 all users must have received such training.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form** Solid

**Appearance** Grey-brown granules

**Odour** Slight odour

**Melting Point** 115°C

**Solubility in Water** Disperses in water. Not soluble.

**Flash Point** 207°C for pure sulphur

**Flammability** Not flammable  
Danger of dust explosion.  
May form dust clouds.

## 10. STABILITY AND REACTIVITY

**Chemical Stability** Stable under normal conditions.

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<b>Incompatible Materials</b>	Corrosive to steel when wet.
<b>Hazardous Reactions</b>	Keep away from strong oxidising agents.
<b>Hazardous Polymerization</b>	Hazardous polymerisation is not possible.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Toxicology Information</b>	No harmful effects are expected if the precautions on the label and this MSDS are followed.
<b>Inhalation</b>	May cause irritation to mucous membranes.
<b>Ingestion</b>	Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.
<b>Skin</b>	May irritate the skin. Avoid formation of dusts. Sulphur dust on (sweaty) skin can become irritating by formation of acids.
<b>Eye</b>	The concentrate may cause irritation of the eyes. May cause some discomfort if contact is prolonged.
<b>Chronic Effects</b>	Regular exposure may result in chronic bronchitis.
<b>Acute Toxicity - Oral</b>	LD50 (rat) >2,200 mg/kg for the formulated product
<b>Acute Toxicity - Dermal</b>	LD50 (rat) >2,000 mg/kg for the formulated product
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) >5.4 mg/l for the formulated product
<b>Eye Irritation</b>	Mild eye irritant.
<b>Skin Irritation</b>	Mild skin irritant.

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## 12. ECOLOGICAL INFORMATION

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<b>Persistence / Degradability</b>	Loss from soil is principally by microbial degradation.
<b>Other Precautions</b>	Do not spray in high winds. 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>	Not toxic to fish. LC50 (96 hr) for rainbow trout is >100 mg/l for the formulated product
<b>Acute Toxicity - Daphnia</b>	LC50 (48 hr) for the formulated product is >100 mg/l.
<b>Acute Toxicity - Other Organisms</b>	Not toxic to bees.

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## 13. DISPOSAL CONSIDERATIONS

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<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 (ChemCollect).
<b>Container Disposal</b>	Do not use this container for any other purpose. Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in 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.

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## 14. TRANSPORT INFORMATION

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<b>Transport Information</b>	It is good practice to separate this product from food, food related materials, animal feedstuffs, seed or fertilisers during transport.
<b>U.N. Number</b>	None Allocated
<b>DG Class</b>	None Allocated

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<b>Hazchem Code</b>	None Allocated
<b>Packing Group</b>	None Allocated
<b>Storage and Transport</b>	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

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## 15. REGULATORY INFORMATION

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<b>Poisons Schedule</b>	Not Scheduled
<b>Packaging &amp; Labelling</b>	KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>AICS (Australia)</b>	All of the components in this product are listed on the Australian Inventory of Chemical Substances.

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## 16. OTHER INFORMATION

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<b>Contact Person/Point</b>	Normal Hours: Mr Volker Maier	Phone: (03) 9282 1000
	After Hours: Shift Supervisor	Phone: 1800 033 498
<b>Revisions Highlighted</b>	The MSDS was reviewed. Minor changes were made to the information.	
<b>Other Information</b>	© Registered Trademark of BASF ...End Of MSDS...	