

# MATERIAL SAFETY DATA SHEET



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## STATEMENT OF HAZARDOUS NATURE

Not hazardous according to criteria of National Occupational Health and Safety Commission.

### COMPANY DETAILS:

Company: Bayer CropScience Pty Ltd ABN 87 000 226 022  
Address: 391 – 393 Tooronga Road, East Hawthorn  
Victoria 3123 Australia  
Telephone/Facsimile: (03) 9248 6888/(03) 9248 6800  
Website Address: [www.bayercropscience.com.au](http://www.bayercropscience.com.au)  
Emergency Telephone Number: 1800 033 111 - Orica SH&E Shared Services

## IDENTIFICATION

Product Name: **Top Wettable Sulphur Fungicide and Miticide**

Other Names: Not applicable  
Manufacturer's Product Code: BAS 175 01 F  
SAP Product Code: 120482 (15 kg)  
UN Number: Not applicable  
Dangerous Goods Class and Subsidiary Risk: Not classified as dangerous goods for transport by road or rail  
Hazchem Code: Not applicable  
Proper Shipping Name: Not applicable  
Packing Group: Not applicable  
EPG: Not applicable  
Chemical Family: Inorganic  
Poisons Schedule Number: Not scheduled  
Use: Agricultural fungicide and miticide for grapevines and other crops

### Physical Description/Properties

Appearance: Grey brown granules with faint specific odour  
Boiling Point/Melting Point: Not available  
Vapour Pressure: Low  
Bulk density: 0.8 - 1.0 kg/L  
Flashpoint: Not applicable  
Flammability Limits: Not applicable  
Solubility in Water: Disperses

### Other Properties:

pH: Approximately 6.5 to 7.5 (10 g/L water)  
Auto-ignition temperature: Not self-igniting  
Ignition temperature: 25° C  
Formulation: Water dispersible granules

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## Ingredients:

Chemical Name:	CAS Number:	Proportion g/kg:
Sulphur	[7704-34-9]	800
Other ingredients	(non hazardous)	200

## HEALTH HAZARD INFORMATION

### Health Effects:

#### Acute:

Swallowed: Practically non-toxic to humans and animals.

Eye: Particulate material may irritate the eyes.

Skin: The product has low acute dermal toxicity.

Inhaled: May irritate mucous membranes.

*Chronic:* No sensitising effect.

### First Aid

**If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Material Safety Data Sheet to a doctor.**

Swallowed: Wash out mouth with water. Do not induce vomiting. Give plenty of water to drink. Keep patient at rest and seek medical advice.

Eye: Rinse immediately with clean water for at least 15 minutes and obtain medical aid.

Skin: Carefully remove contaminated clothing. Wash affected area with soap and water. Seek medical aid if at all worried.

Inhaled: If inhaled, remove to fresh air and keep at rest. Seek medical advice if at all worried.

First Aid Facilities: Ensure washing facilities are available.

**Advice to Doctor:** Treat symptomatically. No known antidote.

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## PRECAUTIONS FOR USE

- Exposure Standards:** No exposure standard has been assigned by the National Occupational Health and Safety Commission for sulphur. The exposure standard for "Dusts not otherwise classified" applies:
- TLV – TWA 10 mg/m<sup>3</sup> (inspirable dust)
- Exposure standard – Time Weighted Average (TWA)* means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
- Engineering Controls:** Control process conditions to avoid contact. Use only in well-ventilated areas.
- Personal Protection:**
- Eyes:** Wear safety glasses to prevent eye contact.
  - Clothing:** Wear suitable protective clothing such as cotton overalls buttoned to the neck and wrist.
  - Gloves:** Wear chemical resistant gloves.
  - Respiratory:** Wear a dust mask if necessary to avoid breathing dust or spray.
  - Other:** Do not eat, drink or smoke until after washing. Wash thoroughly after handling. Take steps to prevent electro-static discharge.
- Flammability:** Combustible when exposed to heat or flame or by chemical reaction with oxidising substances. If fine dust is formed, dust / air mixtures can build up static electrical charges which may be explosive.

## SAFE HANDLING INFORMATION

### Storage and

### Transport:

Corrosivity Hazards: No data

Handling & Storage  
Precautions:

Keep out of reach of children. Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Keep the bag sealed to prevent deterioration. Prevent dust cloud generation. Protect the product from moisture. Take precautionary measures against static discharges. Keep away from food, drink and animal feeding stuffs. Do not store for long periods in direct sunlight. Store below 40°C.

Transport:

Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (Although sulphur is listed as a Class 4.1 flammable solid, this product does not meet the criteria for this classification.)

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## SAFE HANDLING INFORMATION

### Spills and Disposal:

Spillage or Leak  
Procedures:

Extinguish or remove possible sources of ignition. Avoid contact with the spilled material or contaminated surfaces. When dealing with spills do not eat, drink or smoke and wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section above. Prevent spilled material from entering drains or watercourses. Avoid creating dust. Cover spilled product with sand or dampen with water. Sweep up spillage. Collect and store in properly labelled, sealed drums for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

Waste Disposal  
Methods:

Single rinse before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Puncture and bury empty containers in a local authority landfill. If no land fill is available, bury the containers below 500 mm 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. Dispose of waste product via a licensed disposal contractor to an approved landfill.

### Fire/Explosion Hazard:

Extinguishing Media:

Water fog, fine water spray, foam, dry agent or carbon dioxide.

Special Fire Fighting  
Procedures:

Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Toxic, irritating and suffocating gas may be evolved in a fire. If it can be done safely, remove intact containers from the fire. Bund area to prevent contamination of water sources. Dispose of fire control water or other extinguishing agent and spillage safely later.

Reactivity Hazards:

Incompatible with oxidising agents, organic peroxides and spontaneously combustible substances. Sulphur ignites in air above 261° C. It combines easily with many other substances. Produces toxic sulphur dioxide gas on burning. Forms explosive mixtures with oxidising agents.

### OTHER INFORMATION:

Animal toxicity data:

Oral LD <sub>50</sub> (mg/kg)	>2200	Species	Rat
Dermal LD <sub>50</sub> (mg/kg)	>2000	Species:	Rat
Inhalation LC <sub>50</sub> (mg/L)	5.4 (4 h)	Species:	Rat
Eye irritation	Non irritating	Species:	Rabbit
Skin irritation	Non irritating	Species:	Rabbit
Sensitisation	Non sensitising	Species	Guinea pig

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Environmental /  
Ecological Effects  
(sulphur):

Non toxic to fish. Non-toxic to bees. Non-toxic to *Coccinella septempunctata*, *Amblyseius potentilla*, *A. finlandicus*, *Anthocoris nemorum*, *chrysoperla carnea*. Toxic to *Typhlodromus pyri*, *Trichogramma cacoeciae*, *Coccyformimus turionellae*. Low toxicity to birds and worms.

Fish toxicity: LC<sub>50</sub> (96 h) *Oncorhynchus mykiss* - >100 mg/L  
Bird toxicity: Acute oral LC<sub>50</sub> (8 d) for bobwhite quail > 5000 ppm.  
Other: Toxicity to *Daphnia magna* LC<sub>50</sub> (48 h) >1000 mg/L.  
Toxicity to Algae EC<sub>50</sub>/LC<sub>50</sub> > 100 mg/L

Do not contaminate streams, rivers or waterways with the product or used containers.

The product is an inorganic substance, and hence it cannot be biologically eliminated. Do not allow the product to enter drains or sewers in large quantities. The product is only slowly eliminated from biological sewage treatment plants.

Special Precautions /  
Comments:

None

Data Sources /  
References:

Supplier's Material Safety Data Sheet  
British Crop Protection Council – The Pesticide Manual, 12<sup>th</sup> edition  
The Merck Index – tenth edition

## CONTACT POINT:

Emergency Contact Number: 1800 033 111 (Orica SH&E Shared Services)  
Development Manager: (03) 9248 6888

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.