

MATERIAL SAFETY DATA SHEETDate of Issue: August 26th 2010**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product name **Sportak® Fungicide**
Other names None
Product codes and pack sizes 4208411 (1 L)
Chemical group Imidazole
Recommended use Fungicide for agricultural use
Formulation Emulsion, oil in water (EW)
Supplier Bayer CropScience Pty Ltd ABN 87 000 226 022
Address 391 - 393 Tooronga Road, East Hawthorn
 Victoria 3123, Australia
Telephone (03) 9248 6888
Facsimile (03) 9248 6800
Website www.bayercropscience.com.au
Contact Development Manager (03) 9248 6888
Emergency Telephone Number 1800 033 111 – Orica SH&E Shared Services

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
HAZARDOUS SUBSTANCE (See risk phrase below) – DANGEROUS GOOD
VERY TOXIC TO AQUATIC ORGANISMS

Hazard classification Hazardous (National Occupational Health and Safety Commission - NOHSC)
Risk phrases R22 – Harmful if swallowed.
Safety phrases See Sections 4, 5, 6, 7, 8, 10, 12, 13
ADG classification See Section 14.
SUSDP classification (Poison Schedule) Schedule 6 (Standard for the Uniform Scheduling of Drugs and Poisons)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration (g/L)
Prochloraz	[67747-09-5]	450
o-sec-Butyl phenol	[89-72-5]	140
1,2-propanediol	[57-55-6]	65
Other ingredients, including emulsifiers, solvents and water	(non hazardous)	475

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4. FIRST AID MEASURES

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 the doctor.

Inhalation	If inhaled move to fresh air and keep at rest. Obtain medical advice if symptoms persist.
Skin contact	Carefully remove contaminated clothing. Wash affected areas with soap and water. Seek medical aid if symptoms persist.
Eye contact	Rinse eyes immediately with plenty of clean water and obtain medical advice.
Ingestion	Wash out mouth with water. Do NOT induce vomiting. Keep patient at rest and seek medical advice as above.
First Aid Facilities	Ensure eyewash and shower facilities are available.
Medical attention	<i>Local contamination:</i> Symptoms: Slight skin and eye irritation; irritation of mucous membranes. Treatment: Initial treatment should be symptomatic and supportive after decontamination. <i>Systemic poisoning:</i> Symptoms: gastrointestinal irritation and possible liver damage. For systemic poisoning initial treatment should be symptomatic and supportive. If a large amount of this product is ingested the following measures should be considered: Monitor liver and central nervous system function. Gastric lavage with charcoal administration, if less than 1 hour after ingestion. Further treatment, if necessary. There is no specific antidote. Recovery is expected to be spontaneous.

5. FIRE FIGHTING MEASURES

Extinguishing media	Water spray, alcohol-resistant foam, dry chemical, carbon dioxide. Do not use a high volume water jet.
Hazards from combustion products	Dangerous gases may be evolved in a fire.
Precautions for fire fighters	This product is a combustible liquid. Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Otherwise, spray unopened containers with water to keep cool. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later.
Hazchem code	3Z

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6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled material or contaminated surfaces. Extinguish possible ignition sources. Do not smoke, eat or drink during the clean up process. Wear personal protective clothing and equipment as detailed in Section 8 PERSONAL PROTECTION. Keep people and animals away. Contain spill and absorb with earth, sand, clay, or other absorbent material. Prevent spilled material from entering drains or watercourses. Collect and store in properly labelled drums for safe disposal. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc. is unavoidable, warn the local water authority.

7. HANDLING AND STORAGE

Handling	Keep out of reach of children. Product is poisonous if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing. Keep away from sources of ignition. Vapours may form an explosive mixture with air.
Storage	Store in the closed, original container in a cool, well ventilated, secure area. Do not store for prolonged periods in direct sunlight. Protect the product from frost.
Flammability	The product is a combustible liquid, Class C1, i.e. flash point is between 61 and 150 °C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards	The applicable NOHSC exposure standards are: <i>Propane-1,2-diol:</i> Vapour and particulates - TWA 150 ppm, 474 mg/m ³ Particulates only - TWA 10 mg/m ³ <i>o-sec-Butyl phenol:</i> TWA 5 ppm, 31 mg/m ³ Skin notation <u>Definitions</u> <i>Exposure standard – Time Weighted Average (TWA)</i> means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week. <i>Skin notation</i> – Absorption through the skin may be a significant source of exposure.
Biological limit values	None allocated
Engineering controls	Control process conditions to avoid contact. Use local exhaust ventilation indoors. Use in a well-ventilated area only.
Personal Protective Equipment	Eyes: Safety goggles if exposure is possible Clothing: Cotton overalls buttoned to the neck and wrist to avoid skin contact Gloves: Elbow-length PVC or nitrile gloves Respiratory: Not normally required. If inhalation of product is likely, an AS/NZS 1715/1716 approved respirator should be worn.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-white liquid
Odour:	Faint
pH:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Boiling point:	Not available
Freezing/melting point:	Not available
Solubility:	Miscible with water
Density:	Approximately 1.13 g/mL at 20° C
Flash Point:	> 95 ° C, closed cup
Flammability (explosive) limits:	Not available
Auto-ignition temperature:	Not available
Partition coefficient (octanol/water):	<i>Prochloraz</i> : Log P _{ow} = 4.38

10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions of storage and use.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	None
Hazardous decomposition products	Dangerous gases may be evolved in a fire.
Hazardous reactions	None

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation	This product is expected to have low toxicity by inhalation.
Skin contact	Will irritate the skin. Sportak was not a skin sensitiser in the guinea pig test.
Eye contact	Will irritate the eyes.
Ingestion	Harmful if swallowed.

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11. TOXICOLOGICAL INFORMATION - continued

ANIMAL TOXICITY DATA - PRODUCT

Acute:

Oral toxicity	LD ₅₀ rat: > 2000 mg/kg
Dermal toxicity	LD ₅₀ rat: > 4000 mg/kg
Inhalation toxicity	Not available
Skin irritation	Slightly irritating (rabbit)
Eye irritation	Slightly irritating (rabbit)
Sensitisation	Non sensitising (guinea pig)

Chronic:

Prochloraz is not mutagenic, carcinogenic or teratogenic. Ingestion of excessive amounts by pregnant animals resulted in maternal and foetal toxicity. Chronic exposure may cause damage to the central nervous system and liver.

12. ECOLOGICAL INFORMATION

Very toxic to aquatic organisms. Low toxicity to birds, bees and earthworms.
DO NOT contaminate streams, rivers, or waterways with Sportak or the used containers.

Ecotoxicity

Prochloraz:

Fish toxicity: LC₅₀ (96 h) rainbow trout (*Onchorhynchus mykiss*) 1.5 mg/L

LC₅₀ (96 h) bluegill sunfish 2.2 mg/L

Daphnia toxicity: EC₅₀ (48 h) water flea (*Daphnia magna*) 4.3 mg/L

Algal toxicity:

EC₅₀ (72 h) algae (*Selenastrum capricornutum*) 0.094 mg/L

Bird toxicity:

Acute oral LD₅₀ mallard duck > 1954 mg/kg

Acute oral LD₅₀ bobwhite quail 662 mg/kg

Sportak Fungicide:

Fish toxicity: LC₅₀ (96 h) rainbow trout (*Oncorhynchus mykiss*) 4.41 mg/L (similar formulation)

Daphnia toxicity: EC₅₀ (48 h) water flea (*Daphnia magna*) 7.21 mg/L

Toxicity to algae: EC₅₀ (72 h) algae 0.026 mg/L (similar formulation)

Environmental fate, persistence and degradability, mobility

Prochloraz is readily adsorbed onto organic matter and is degraded by biological activity and by sunlight. Prochloraz is immobile in soil, not readily degradable and not readily leached. DT₅₀ under field conditions is 5-37 days.

Bioaccumulation - prochloraz

Oncorhynchus mykiss (rainbow trout)

Bioconcentration factor (BCF): 200

Elimination: yes

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13. DISPOSAL CONSIDERATIONS

Containers

Rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Dispose of at a local authority landfill. If no landfill 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.

Spent fruit dip/spray

Sportak is readily adsorbed onto organic matter and is degraded by biological activity and by sunlight. Dispose of spent fruit dip in a disposal pit specifically marked and set up for the purpose. The addition of activated carbon, soil, manure or humus sludge will assist the degradation.

14. TRANSPORT INFORMATION

UN number	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (contains prochloraz)
Class and Subsidiary Risk	Class 9
Packing Group	Packing Group III
Hazchem code	•3Z
Marine Pollutant	Yes
Note for Road and Rail Transport	According to AU01, Environmentally Hazardous Substances in packagings, IBCs or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code

15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994

Australian Pesticides and Veterinary Medicines Authority approval number: 30484

See also Section 2.

16. OTHER INFORMATION

Trademark information Sportak® is a Registered Trademark of Bayer.

Preparation information Replaces November 27th 2009 edition.
Reasons for revision: Hazard identification.

This MSDS summarises 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.

END OF MSDS