

QUANTUM® SEED TREATMENTDATE OF ISSUE: 23rd April, 2004
Page 1 of 5**STATEMENT OF HAZARDOUS NATURE**

Quantum Seed Treatment has been determined as hazardous according to the criteria of Worksafe Australia.

COMPANY DETAILS

COMPANY: Crompton Specialties Pty Ltd
ADDRESS: Level 7, 435 King William Street Adelaide SA 5000
TELEPHONE NUMBER: (61-8) 8231 5050
FACSIMILE NUMBER: (61-8) 8231 7070
EMERGENCY TELEPHONE NUMBER: 1800 033 111

IDENTIFICATION

PRODUCT NAME: Quantum Seed Treatment
OTHER NAMES: Fluquinconazole
MANUFACTURER'S CODE: None Allocated
UN NUMBER: 2902
DANGEROUS GOODS CLASS: 6.1
HAZCHEM CODE: 2X
POISONS SCHEDULE NUMBER: S6
USE: For the suppression of take-all and Septoria tritici blotch, the early season control of leaf rust and stripe rust and control of common bunt, loose smut and flag smut in wheat. For the suppression of blackleg in canola.
SUBSTANCE CHEMICAL FAMILY: Azole

PHYSICAL DESCRIPTION / PROPERTIES:

APPEARANCE AND ODOUR: Flowable red liquid suspension with a faint odour.
MELTING POINT: Not available
BOILING POINT: Not available
VAPOUR PRESSURE: Not determined
FLASHPOINT: Not combustible
FLAMMABILITY LIMITS (%): Not determined
SOLUBILITY (water): Miscible
SPECIFIC GRAVITY: 1.07g/mL at 20C
VAPOUR DENSITY: As for water
pH VALUE: Approx. 7

INGREDIENTS:

CHEMICAL ENTITY	CAS NUMBER	PROPORTION
Other ingredients	(non hazardous)	~900g/L
Fluquinconazole	136426-54-5	167 g/L

QUANTUM® SEED TREATMENTDATE OF ISSUE: 23rd April, 2004
Page 2 of 5**HEALTH HAZARD INFORMATION**

Quantum Seed Treatment has been determined as hazardous according to the criteria of Worksafe Australia.

HEALTH EFFECTS:**ACUTE**

- Swallowed:** Harmful if swallowed.
- Eye:** May irritate the eyes. Avoid contact with eyes. In animal test the product was found to be non-irritating to rabbit eyes.
- Skin:** Negligible skin penetration. Not irritating or sensitising to skin in animal tests.
- Inhaled:** Mist is harmful by inhalation, but not required to be classified as such.

CHRONIC

Fluquinconazole gave evidence of non-genotoxic effects not relevant to man. Negative in a battery of genotoxicity tests. No treatment related effects in a rat multi-generation study at doses at 0.9mg/kg/day. At higher dose levels there was parental toxicity and effects on pup growth and survival.

FIRST AID:

- Swallowed:** If swallowed, immediately contact a doctor or Poisons Information Centre (telephone 131 126), and follow the advice given. Wash out mouth with water. Keep patient at rest.
- Eye:** Rinse immediately with clean water, including under eyelids, for at least 15 minutes and obtain medical advice.
- Skin:** Remove contaminated clothing. Wash affected areas with plenty of soap and water. If irritation persists seek medical advice.
- Inhaled:** Inhalation improbable. If inhaled, remove to fresh air and obtain medical advice.
- First aid measures:** If poisoning occurs, immediately contact a doctor or Poisons Information Centre 13 11 26, and follow the advice given. Show this Material Safety Data Sheet to a doctor.

FIRST AID FACILITIES:

None.

ADVICE TO DOCTOR:*Local contamination:*

May cause slight skin and eye irritation. Symptoms of systemic poisoning include gastro-intestinal irritation, possible liver damage, lethargy, weakness, ataxia, muscle tremors and incontinence. Treatment should be symptomatic after decontamination.

Systemic Poisoning:

Initial treatment should be symptomatic and supportive. In the event of large exposure/amount (more than one mouthful) being ingested, carry out gastric lavage and charcoal administration. Monitor the respiratory, cardiac and liver functions and the central nervous system, with particular reference to liver enzymes. There is no specific antidote.

QUANTUM® SEED TREATMENTDATE OF ISSUE: 23rd April, 2004
Page 3 of 5**PRECAUTIONS FOR USE****EXPOSURE STANDARDS:**

No exposure standard has been assigned by the National Occupational Health and Safety Commission (Worksafe Australia).

ENGINEERING STANDARDS:

Control process conditions to avoid contact. Use local exhaust ventilation during manufacture.

PERSONAL PROTECTION:

Respirator type: (AS 1716) None required when handling the product. Wear dust mask if handling dried treated grain in confined spaces.
Eye protection: Safety goggles.
Glove type: Elbow –length PVC gloves.
Clothing: Cotton overalls buttoned to the neck and wrist (or equivalent clothing).
Other Information: Do not eat, drink or smoke until after washing. Wash thoroughly after handling. After each days use wash gloves, goggles and contaminated clothing.

FLAMMABILITY:

Product is not combustible.

SAFE HANDLING INFORMATION**STORAGE AND TRANSPORT:**

Correct shipping Name: PESTICIDES, LIQUID, TOXIC, N.O.S.* - (CONTAINS FLUQUINCONAZOLE)
Transport: This product is classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail. PESTICIDES, LIQUID, TOXIC, N.O.S.* - (CONTAINS FLUQUINCONAZOLE), Class: 6.1, PG III, UN 2902.
EPG Number: 6B1
IERG Number: 34
Packaging Method: 5.9.6.1
Handling and storage: Keep out of reach of children. Wash thoroughly with soap and water after handling and before eating, drinking or smoking. Store in the closed, original container in a cool, secure, well-ventilated area. Do not store for prolonged periods in direct sunlight. Do not store near foodstuffs or animal feed. Protect from frost. Store treated seed in clearly marked bags or silos, away from other grain, animal feed or foodstuffs, in a cool, dry storage area.

SPILLS:

Avoid contact with spilled material or contaminated surfaces. If ordinary clothing becomes contaminated remove it immediately. When dealing with the spillage, do not eat, drink or smoke and wear personal protective clothing as detailed in 'Personal Protection' section. Keep people and animals away. Prevent entry into drains, sewers and watercourses. Contain/absorb spillage in sand/earth or in a suitable inert material. Transfer collected material to heavy-duty plastic drums. Seal and label ready for disposal.

QUANTUM® SEED TREATMENTDATE OF ISSUE: 23rd April, 2004
Page 4 of 5**DISPOSAL:**

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycle or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for the purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

FIRE / EXPLOSION HAZARD:**Fire fighting procedures:**

Firefighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715, 1716). If possible and without risk, remove intact containers from exposure to fire. Otherwise, spray unopened containers with water to keep cool. Whenever possible, contain fire-fighting water by bunding area with sand or earth to prevent it entering any bodies of water.

Extinguishing media:

If product is involved in a fire, use water spray, foam, dry powder, carbon dioxide or sand.

Stability and reactivity:

Stable under normal conditions of use. May give off toxic fumes if burnt.

Hazchem Code:

2X

OTHER INFORMATION**Toxicology:**

Acute toxicity data (similar product):

Oral LD50 (mg/kg): 429-492 (species: rat)

Dermal LD50 (mg/kg): >4000 (species: rat)

Inhalation LC50 (mg/L): No data (species: ---)

Other toxicity:

Acute oral LD50 Duck > 2000 mg/kg

LC50 quail 4392 mg/kg

Low toxicity to honey bees and earthworms.

Information on Ecological Effects:

Data given in this section are for the active ingredient.

Aquatic toxicity:

96 hr LC50 trout 1.9mg/L, carp 1.9mg/L

Mobility:

Data given in this section are for the active ingredient:

Immobile in soil.

Persistence/Degradability:

Data given in this section are for the active ingredient.

Soil DT50 200-300 days (pH 7.0)

Water DT50 21.9 days (pH 7.0)

Photolysis DT50 92.4 days (290-360 nm)

BOD/COD 1.29 mg/O₂/L

Sediment/Water system DT50 12-15 days.

Bioaccumulation:

Data given in this section are for the active ingredient.

Log Pow = 3.24

QUANTUM® SEED TREATMENTDATE OF ISSUE: 23rd April, 2004
Page 5 of 5**IMPORTANT PLEASE READ:**

This Material Safety Data Sheet provides certain basic health and safety information (“Information”) about Quantum Seed Treatment (“Product”).

You should read the Information carefully. This product may be dangerous if not handled or used properly. You should not use the Product unless you are satisfied after reading the Information that it is suitable for your purposes outline.

Crompton Specialties Pty Ltd and its related companies and distributors (“Crompton”) shall not be liable (including, without limitation, liable in negligence) for any expenses, losses, damages or costs that you may suffer or incur as a result of your failure to read the Information carefully or the Product being incapable of achieving any purpose.

Crompton excludes all implied conditions, warranties and other terms implied by statute or common law, except any implied condition or warranty the exclusion of which would contravene any statute or cause any part of this paragraph to be void (“Non-excludable Condition”). In the event of any breach of any Non-excludable Condition (other than where the customer is a “consumer” as defined under the Trade Practices Act and there is a breach of any Non-excludable Condition in respect of goods or service of a kind ordinarily acquired for personal, domestic or household use or consumption) Crompton’s liability shall be limited to any one of supplying, replacing or repairing the goods in respect of which the breach occurred.

CONTACT POINT:

CROMPTON SPECIALTIES PTY LTD
LEVEL 7, 435 KING WILLIAM STREET
ADELAIDE SA 5000

PHONE: (61-8) 8231 5050
FACSIMILE: (61-8) 8231 7070

®Quantum is a registered trademark of a subsidiary of Crompton Corporation.