

STATEMENT OF HAZARDOUS NATURE

Vitaflo C Seed Treatment is classified as hazardous according to the criteria of the National Occupational Health & Safety Commission.

COMPANY DETAILS

COMPANY: Crompton Agribusiness Pty Ltd
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IDENTIFICATION

PRODUCT NAME: Vitaflo® C Seed Treatment
OTHER NAMES: Carboxin & Cypermethrin
MANUFACTURER'S CODE: D735 / PP383
UN NUMBER: None allocated
DANGEROUS GOODS CLASS: None allocated
HAZCHEM CODE: None allocated
POISONS SCHEDULE NUMBER: S5
USE: For seed treatment of wheat, barley, oats and triticale for control of fungal diseases at planting and for protection against insect pests of stored seed grain.

PHYSICAL DESCRIPTION / PROPERTIES:

APPEARANCE AND ODOUR: Red-purple liquid suspension with faint odour
MELTING POINT: Gels
BOILING POINT: 102°C
VAPOUR PRESSURE @ 20°C): 15 mm Hg
SPECIFIC GRAVITY (H₂O = 1): 1.16
FLASHPOINT: 105°C
FLAMMABILITY LIMITS (%): No data
SOLUBILITY: 56% @ 20°C

OTHER PROPERTIES:

STABILITY: Light stable at ambient temperatures and pressures. Will thicken irreversibly with heat.
INCOMPATIBILITY: Strong acids and alkalis
REACTIVITY: Cypermethrin reacts with oxidizing agents.
AUTOIGNITION TEMPERATURE: 338°C
EVAPORATION RATE: 0.11 (butyl acetate = 1)

INGREDIENTS:

CHEMICAL ENTITY	CAS NUMBER	PROPORTION
Carboxin	5234-68-4	400.0 g/l
Cypermethrin	52315-07-8	3.2 g/L

HEALTH HAZARD INFORMATION

Vitaflo C has been determined as being hazardous and classified as an Irritant (Xi), due to the cypermethrin content, according to the NOHSC, Approved Criteria for Classifying Hazardous Substances.

Irritant (Xi): R43 May cause sensitisation by skin contact

HEALTH EFFECTS:**ACUTE**

- Swallowed:** Slightly toxic. May cause vomiting and headaches.
Acute oral LD₅₀ (rat) > 5,000 mg/kg carboxin only formulation (Vitaflo)
= 3820 mg/kg carboxin technical
= 263 mg/kg cypermethrin technical
- Eye:** Contact with eyes can cause severe irritation (carboxin technical).
- Skin:** Carboxin has a low dermal toxicity but due to the presence of cypermethrin, transient tingling, burning or numbness may be caused on exposed skin areas.
Acute dermal LD₅₀ (rabbit) > 23,600 mg/kg carboxin only formulation (Vitaflo)
> 8,000 mg/kg carboxin technical
> 2,000 mg/kg cypermethrin technical.
- Inhaled:** Individuals with respiratory problems should avoid inhalation exposure.
Acute Inhalation LC₅₀ (rat) > 20 mg/L/1hr

CHRONIC

- Skin:** Carboxin has a low dermal toxicity but due to the presence of cypermethrin, repeated or prolonged skin contact may lead to irritant contact dermatitis.
- Inhaled:** Chronic inhalation may cause lung damage.
- Toxicology:** Studies in animals have shown that repeated doses of carboxin and cypermethrin do not produce mutagenic or teratogenic effects. Studies in animals have shown that repeated doses of carboxin does not show carcinogenic effects, however, studies with cypermethrin are inconclusive. Therefore, cypermethrin may be a weak or possible carcinogen at very high dose rates. Long term exposure may cause liver damage.

FIRST AID:

If poisoning occurs contact a doctor or Poison Information Centre. Phone Australia 131 126.

- Swallowed:** If patient is fully conscious, administer large quantities of water. Seek medical advice.
- Eye:** Hold eye(s) open and flush with water for 15 minutes. Seek medical advice.
- Skin:** Wash thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Seek medical advice.
- Inhaled:** Remove to fresh air. If breathing difficulties occur, seek medical advice.

FIRST AID FACILITIES:

Eye wash station.

ADVICE TO DOCTOR:

Treat symptomatically.

PRECAUTIONS FOR USE**EXPOSURE STANDARDS:**

Recommend hygiene standard (TWA) for cypermethrin = 0.5 mg/m³

ENGINEERING STANDARDS:

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Sufficient ventilation to minimise vapour exposure. Ensure ventilation is adequate to maintain air concentrations below cypermethrin exposure standard. Keep containers closed when not in use.

PERSONAL PROTECTION:

Avoid all personal contact. When using, do not eat, drink or smoke. Wear cotton overall buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves, face shield and disposable face mask. In the absence of adequate ventilation, use a respirator fitted with an agricultural chemical cartridge(s). After use and before eating, drinking, smoking or using the toilet, wash hands, arms and face thoroughly with soap and water. Launder clothing and other protective equipment before storing or re-using.

FLAMMABILITY:

Not flammable under normal conditions of use.

SAFE HANDLING INFORMATION**STORAGE AND TRANSPORT:**

Not classed as a Dangerous Good by the Australian Code for the Transport of Dangerous Goods by Road or Rail. This material is a Schedule Poison and must be stored, maintained and used according to the relevant regulations.

Store in original container, away from seeds, fertilizers, animal and human feedstuffs, and strong acids or alkalis and oxidizing agents. Keep dry and out of direct sunlight. Store below 40°C. Keep containers closed when not in use.

SPILLS:

Use personal protective equipment as outlined above. Absorb onto inert material. Transfer into secure containers for proper disposal. Prevent entry into waterways, drains or confined areas. Do not reuse the containers for any purpose. If there is a contamination of crops or waterways, advise emergency services or State Department.

DISPOSAL:

For disposal after intended use: 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 recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill 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.

For disposal after spill or accident: Dispose of sealed containers at an approved local waste disposal site.

FIRE / EXPLOSION HAZARD:

Not Flammable. However, in case of fire protect against inhalation of combustion products. On combustion, there is production of oxides of sulphur and nitrogen, and maybe traces of oxides of chlorine and hydrogen chloride. Reacts with strong acids and alkalis and oxidising agents.

Extinguishing Media: Water spray or dry chemical. Contain runoff.

Hazchem Code: None Allocated

**OTHER INFORMATION****ENVIRONMENTAL HAZARDS:**

Not toxic to birds.

Carboxin is not toxic to bees. Cypermethrin is highly toxic to bees. LD₅₀ = 0.03 - 0.13 µg/kg

Moderately toxic to fish:

Carboxin	Rainbow Trout LC ₅₀ (96hour) > 0.1 mg/L
Cypermethrin	Rainbow Trout LC ₅₀ (96 hour) = 0.0082 mg/L
	Bluegill Sunfish LC ₅₀ (96 hour) = 0.0018 mg/L

IMPORTANT PLEASE READ:

This Material Safety Data Sheet provides certain basic health and safety information ("Information") about Vitaflo C 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 Agribusiness 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.

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