

Material Safety Data Sheet

1. Identification of the substance/preparation and company/undertaking

Product

Trade Name: Crown

Recommended Uses: Agricultural Fungicide

Company

Manufacturer / Supplier: Agriguard Ltd
Address: Units 1&2, Block B, Broomfield Business Park
Malahide, Co. Dublin, Ireland
Telephone Number: +353-1-8462044
Fax Number: +353-1-8462489
e-mail: info@agriguard.ie
Emergency Telephone No.: 0870-600-6266 [UK National Poisons Control
Information Service (NPIS) Centre]
01-8379964/66 (Poisons Information Centre, Beaumont
Hospital, Beaumont, Dublin 9, Ireland)

2. Composition/Information on Ingredients

Component	CAS Registry No.	EINECS ELINCS No.	Conc. g/l	R phrase*	Symbol
Epoxiconazole (2RS, 3SR)-1-[3-(2-chlorophenyl)-2,3-epoxy-2-(4-fluorophenyl)propyl]-1H-1,2,4-triazole (IUPAC)	106325-08-0	406-850-2	125	R40, R62, R63, R50/53	Xn, N
Solvento 200	64742-94-5	-	167	R65, R51/53	Xn, N

*Reference section 16

3. Hazards Identification

Dangerous to fish or other aquatic life. Do not contaminate surface waters or ditches.

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4. First Aid Measures

- Skin Contact:** Remove contaminated clothing and wash the affected area immediately with soap and water. Seek medical attention if necessary.
- Eye Contact:** Rinse out with plenty of water with the eyelid held wide open for at least 15 minutes. Seek medical attention.
- Inhalation:** Immediately remove from exposure to fresh air. Seek medical attention immediately.
- Ingestion:** Do not induce vomiting. Wash out mouth with clean water. Seek medical attention immediately.
- Further Information:** If danger of loss of consciousness, place person in recovery position. Apply artificial ventilation if necessary, but care must be taken to avoid contamination of first aider.

Guide to Physician:

The material is of low general toxicity.
There is no documentation of pathological effects in humans.
Treatment should be symptomatic and supportive.
If the product has been swallowed, gastric lavage with proper laryngeal control may be necessary. Ingestion of small quantities activated charcoal as an absorbent in a dosage of 30 grams in 100ml of water may be considered. If symptomatic therapy is indicated for control of restlessness, anxiety or convulsions, then Diazepam is recommended as the drug of choice.

For further advice on treatment contact:
The UK National Poisons Control Information Service (NPIS)
Centre (Emergency Telephone No.: 0870-600-6266) or
The Poisons Information Centre, Beaumont Hospital, Beaumont,
Dublin 9, Ireland (Telephone 01-8379964/66).

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5. Fire-fighting Measures

Suitable extinguishing media: Water spray, dry chemical, carbon dioxide or regular foam.

Extinguishing media which must not be used for safety reasons: None known

Special protective equipment for fire-fighting: Wear protective clothing and self contained breathing apparatus.

Special exposure hazards: Fumes released may contain toxic and/or irritating e.g. hydrogen chloride, hydrogen fluoride, carbon dioxide, carbon monoxide and nitrogen oxides.

Other Information: Intact containers should be removed from risk of exposure to the fire if it is safe to do so. If it is not safe to remove them, spray intact containers with water to keep them cool. Contain fire-fighting water with sand or some such bunding material.

6. Accidental Release Measures

Personal precautionary measures:

Refer to section 8 below for personal protection required.

Environmental-protection measures:

Keep the area isolated and do not allow contamination to enter the sewerage system. If the product has entered the sewerage system or contaminated a public place advise the appropriate authority.
Contaminated soil layers have to be dug out.

Procedures for cleaning/absorption:

Contain/absorb the spillage with a suitable inert absorbent material or sand which should then be transferred to secure containers and send for disposal.

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7. Handling and Storage

Handling: Wash all protective clothing thoroughly after use especially the inside of gloves. When using do not eat, drink or smoke.
Do not breathe fumes. Avoid contact with skin and eyes.

Storage: Store in a cool, dry, well ventilated area in the original containers, access should only be for authorised persons. Store away from food, drink, animal feeding stuffs.

8. Exposure Controls/Personal Protection

Occupational exposure limits:

Not applicable.

Engineering measures to reduce exposure:

Ensure adequate ventilation especially in confined areas, eyewash facility and shower.

Personal protective equipment:

Respiratory protection: Wear a full mask with filter ABEK-P2 approved respirator for pesticides following the manufacturers instructions for use.

Eye protection: Wear eye/face protection.

Hand protection: Wear waterproof gloves.

Skin and body protection: Wear suitable protective suit and chemical resistant boots. Remove and wash contaminated clothing before re-use.

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9. Physical and Chemical Properties

Appearance:	Liquid
Colour:	White
Odour:	Slightly aromatic
pH:	6-8 (20 ^o C)
Melting Point/Melting point range:	Not applicable
Boiling Point/Boiling Point range:	Not available
Flash Point:	>200 ^o C
Flammability	Non flammable
Autoflammability	Not available
Explosive properties: Lower limit Upper limit	Not explosive
Oxidising properties	Not available
Vapour Pressure:	Not available
Relative density:	1.02 – 1.08 g/ml @ 20 ^o C
Solubility Water solubility Fat solubility	Dispersable Not available
Partition coefficient n-octanol/water	3.44 (active ingredient)
Other Data:	None

10. Stability and Reactivity

Stability:	Stable when stored as directed at ambient temperature
Conditions to avoid:	Protect from light, naked flame and sources of heat. Decomposes on heating.
Materials to avoid:	None
Hazardous decomposition products:	None if stored and handled correctly.

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11. Toxicological Information

Acute toxicity:

LD₅₀ (oral, rat): >2200 mg/kg. Low toxicity

LD₅₀ (skin, rat): >4000 mg/kg. Non irritant

LC₅₀ (inhalation, rat): 2.12 mg/l (4 hours). Unlikely to cause a problem.

Sensitisation: Non sensitiser.

Further toxicological information:

After skin contact: Non irritant to rat skin.

After eye contact: Non irritant.

Carcinogenicity: Limited evidence of a carcinogenic effect.

Mutagenicity: Not a mutagen

Reproduction toxicity: possible risk of impaired fertility.

Teratogenicity: Possible risk of harm to the unborn child.

12. Ecological Information

Mobility: No information

Persistence and Degradability: not readily biodegradable. Half lives vary from a few months to more than a year depending on circumstances.

Bioaccumulative potential: Moderate potential for bio-accumulation but rapidly excreted. BCF for Rainbow Trout (whole fish) = 70.

Ecotoxicity:

Rainbow trout (*Oncorhynchus mykiss*) LC50 = 1.1 mg/l, 96 hours

Daphnia EC50 = 0.63 mg/l, 48 hours

Algae EC50 = 0.01 mg/l, 72 hours

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13. Disposal Considerations

Waste from residues/unused products:

Dispose of product concentrate and diluted product according to the 'Code of Practice for the Safe Use of Pesticides on Farms and Holdings' available from HMSO.

Contaminated packaging:

Dispose of empty containers according to the 'Code of Practice for the Safe Use of Pesticides on Farms and Holdings' available from HMSO. Do not re-use container for any purpose.

Further information:

Contact the Local Council Authority for advice on the disposal of pesticide waste, or ask an approved waste disposal contractor.

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14. Transport Information

UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s
(contains alcoxylated fatty alcohol)
UN Number 3082

Road/Railway

Proper shipping name: Environmentally hazardous substance, liquid,
n.o.s (contains alcoxylated fatty alcohol)
UN Number 3082
Class: 9
Packaging group: III
Hazard Identification No.: 90

Sea

Proper shipping name: Environmentally hazardous substance, liquid,
n.o.s (contains alcoxylated fatty alcohol)
UN Number 3082
Class: 9
Packaging group: III
Marine pollutant: P

Air

Proper shipping name: Environmentally hazardous substance, liquid,
n.o.s (contains alcoxylated fatty alcohol)
UN Number 3082
Class: 9
Packaging group: III

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15. Regulatory Information

Classification in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3.

Hazardous components which must be listed on the label:

Epoxiconazole

Symbol(s):	N Xn	Dangerous for the environment Harmful
R phrases:	R50/53 R20 R40 R62 R63	Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment. Harmful by inhalation. Limited evidence of a carcinogenic effect. Possible risk of impaired fertility. Possible risk of harm to the unborn child.
S phrases:	S2 S13 S20/21 S36/37 S46 S35 S57	Keep out of the reach of children Keep away from food, drink and animal feedingstuffs When using do not eat, drink or smoke Wear suitable protective clothing and gloves when handling the concentrate If swallowed, seek medical advice immediately and show this container or label This material and its container must be disposed of in a safe way. Use appropriate containment to avoid environmental contamination.

Designated name: Crown (contains Epoxiconazole 125g/L)

This product is covered by the Control of Pesticides Regulations, 1986, and is labelled accordingly (MAPP 14830).

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16. Other Information

Health and Environmental Hazards:

Text of R phrases mentioned in Section 2

R phrases:	R40	Possible risk of irreversible effects
	R62	Possible risk of impaired fertility
	R63	Possible risk of harm to unborn child
	R65	Harmful: may cause lung damage if swallowed.
	R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Recommended Uses: Agricultural Fungicide

Recommended Restrictions: Refer to statutory conditions on approved product label

Further information:

Date of First Issue: 16/02/10

Disclaimer:

The information contained in this MSDS is designed to give general health and safety guidance on the storage and transport of the substance/preparation to which it relates. Requirements arising from a Risk Assessment of the substance/preparation in a particular working environment should take precedence over any of the guidance contained in this MSDS where there is a difference in the information given. The information contained in this MSDS is accurate at the date of publication and will be updated as and when appropriate. Liability will not be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this MSDS.

Compiled in accordance with EC Directive 91/155/EEC and subsequent amendments EC Directives 93/112/EEC and 2001/58/EC.