

Material Safety Data Sheet

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

Product

Trade Name: AGRIGUARD PRO-TURF

Recommended Uses: Horticultural Fungicide and Worm Control Agent

Company

Manufacturer / Supplier: AgriGuard Ltd
Address: Unit 3, Block B, Tally House, 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. %w/w	R phrase*	Symbol
Carbendazim Methyl benzimidazol-2-ylcarbamate (IUPAC)	10605-21-7	234-232-0	43.0	Muta. Cat. 3: R68	Xn
Alkyl ether sulphate sodium salt	32812-48-9	-	1.0 < 5.0	R36/38	Xi
Ethylene glycol 1,2-Ethanediol (IUPAC)	107-21-1	203-473-3	5.0 < 25.0	R22	Xn

*Reference section 16

3. Hazards Identification

- Possible risk of irreversible effects. Harmful if swallowed.
- > Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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4. First Aid Measures

Skin Contact:	Remove contaminated clothing and wash the affected area with soap and water. Seek medical attention if necessary.
Eye Contact:	Rinse out with plenty of water with the eyelid held wide open for 15 minutes and seek medical attention.
Inhalation:	Immediately remove from exposure to fresh air and seek medical attention if necessary.
Ingestion:	Rinse mouth out with water and do not induce vomiting. Keep patient at rest and seek medical attention immediately.
Further Information:	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).

5. Fire-fighting Measures

Suitable extinguishing media: Water spray, foam, carbon dioxide, dry powder or sand.

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

Special protective equipment for fire-fighting: Wear self contained breathing apparatus and protective clothing (chemical protection suit, boots and plastic or rubber gloves). Do not breathe fumes.

Special exposure hazards: If heated to decomposition may give off toxic fumes.

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.

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6. Accidental Release Measures

Personal precautionary measures:

Avoid contact with the substance however if contact has occurred see section 4 above. 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.

Procedures for cleaning/absorption:

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

7. Handling and Storage

Handling: Keep product in original tightly closed container; do not get on skin, eyes or clothing; do not eat drink or smoke when handling; wash hands before eating drinking or smoking.

Storage: Store in a dry area in the original containers, access should only be for authorised persons. Store away from animal foodstuffs, seeds and fertilisers. Protect from frost.

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8. Exposure Controls/Personal Protection

Occupational exposure limits:

No data is available for the active.

Engineering measures to reduce exposure:

Ensure adequate ventilation especially in confined areas.

Personal protective equipment:

Respiratory protection: Respirator with A2B2P3 filter.

Eye protection: Wear safety goggles conforming to BS 2092.

Hand protection: Wear chemical resistant PVC or nitrile gloves.

Skin and body protection: Wear PVC or chemical resistant disposable overalls and PVC boots.

Industrial Hygiene:

Immediately change contaminated clothing, dispose of if decontamination is not feasible. Keep away from food, drink and animal feedstuffs. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

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9. Physical and Chemical Properties

Appearance:	Liquid
Colour:	Brown
Odour:	Characteristic
pH:	7 to 9
Melting Point/Melting point range:	Not applicable
Boiling Point/Boiling Point range:	Not applicable
Flash Point:	Non combustible
Flammability	Not combustible
Autoflammability	Not applicable
Explosive properties: Lower limit Upper limit	None
Oxidising properties	None
Vapour Pressure:	Not available
Relative density:	Not available
Solubility Water solubility Fat solubility	Miscible Not available
Partition coefficient n-octanol/water	Not available
Other Data: Specific gravity	1.2 @ 20°C

10. Stability and Reactivity

Stability:	Stable at ambient conditions.
Conditions to avoid:	Protect from frost. Extreme temperatures.
Materials to avoid:	None under normal conditions of use.
Hazardous decomposition products:	If heated to decomposition, fumes released may be toxic.

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11. Toxicological Information

Acute toxicity:

LD₅₀ (oral, rat): >5000mg/kg

LD₅₀ (skin, rat): >5000mg/kg

Sensitisation: Does not cause sensitisation on guinea pig skin.

Further toxicological information:

After inhalation: Low toxicity

After skin contact: Slightly irritating to rabbit skin.

After eye contact: Slightly irritating to rabbit eyes.

After swallowing: Low toxicity.

Carcinogenicity: Not carcinogenic in rats.

Genotoxicity: Classified as category 3 mutagen (substances which cause concern for man owing to possible mutagenic effects but where the available information does not satisfactorily demonstrate heritable genetic damage).

Reproductive toxicity: Teratogenic as a result of temporary inhibited microtubule formation.

No adverse effects on reproductive performance or fertility.

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12. Ecological Information

Mobility:	Immobile in soil.
Persistence and Degradability: (data is for active ingredient)	Water DT ₅₀ : >30days (pH 7 @ 20°C) Photolysis DT ₅₀ : >166 days Soil DT ₅₀ : 30 - 90 days (lab conditions), 100 days (field conditions) In sediment/water system DT ₅₀ : 22 - 31days
Bioaccumulative potential: (data is for active ingredient)	Kow = 32. Bioaccumulation factor is 23 to 27 bluegill (whole body)
Aquatic toxicity : (data is for active ingredient)	Guppies LC ₅₀ (96hr): 182mg/l Trout LC ₅₀ (96hr): 0.83mg/l Carp LC ₅₀ (96hr): 0.61mg/l Bluegill sunfish >17.25mg/l Daphnia EC ₅₀ (48hr): 0.13-0.22mg/l Algae EC ₅₀ (72hr): 419mg/l
Other toxicity : (data is for active ingredient)	Quail oral LD ₅₀ : 5826 - 15595mg/kg Low toxicity to bees. Very toxic to earthworms.

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:	Wash out container thoroughly, empty washings into spray tank and dispose of safely. Do not contaminate ponds, waterways or ditches with chemical or used container. 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 carbendazim 43%)

UN Number 3082

Road/Railway

Proper shipping name: Environmentally hazardous substance, liquid,
n.o.s (contains carbendazim 43%)

UN Number 3082

Class: 9

Packaging group: III

Hazard Identification No.: 90

Inland waterways

Proper shipping name: Environmentally hazardous substance, liquid,
n.o.s (contains carbendazim 43%)

UN Number 3082

Class: 9

Item: 11

Letter: c

Hazard Identification No.: 90

Sea

Proper shipping name: Environmentally hazardous substance, liquid,
n.o.s (contains carbendazim 43%)

UN Number 3082

Class: 9

Packaging group: III

Marine pollutant: P

Air

Proper shipping name: Environmentally hazardous substance, liquid,
n.o.s (contains carbendazim 43%)

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:
Carbendazim

Symbol(s):	Xn N	Harmful Dangerous for the environment
R phrases:	R22 R52/53 R68	Harmful if swallowed Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of irreversible effects
S phrases:	S2 S7 S26 S36/37 S39 S49	Keep out of the reach of children Keep container tightly closed In case of contact with eyes, rinse immediately with plenty of water and seek medical advice Wear suitable protective clothing and gloves Wear eye/face protection Keep only in original container

Designated name: AGRIGUARD PRO-TURF (contains carbendazim 500g/l)

This product is covered by the Control of Pesticides Regulations, 1986, and is labelled accordingly (MAPP 11837).

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16. Other Information

Health and Environmental Hazards

Text of R phrases mentioned in Section 2

R phrases: R22 Harmful if swallowed
R36/38 Irritating to eyes and skin
R68 Possible risk of irreversible effects

Recommended Uses: Horticultural Fungicide and Worm Control Agent

Recommended Restrictions: Refer to statutory conditions on approved product label

Further information:

Date of First Issue: 5th November 2003

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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.