

# 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

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

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**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

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### **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.

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## 7. Handling and Storage

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**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

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### **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**

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

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**10. Stability and Reactivity**

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

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## 11. Toxicological Information

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### Acute toxicity:

LD<sub>50</sub> (oral, rat): >5000mg/kg

LD<sub>50</sub> (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

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

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## 13. Disposal Considerations

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<b>Waste from residues/unused products:</b>	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.
<b>Contaminated packaging:</b>	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.
<b>Further information:</b>	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

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**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

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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

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

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### 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:** 5<sup>th</sup> November 2003

**First Revision Date:** 24<sup>th</sup> February 2005

**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.