

SAFETY DATA SHEET



Product Name: TURFCLEAR **Reference No:** 021
Version No.: 2 **Revision Date:** March 2004 **Date of Introduction:** July 1982

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

Product Name TURFCLEAR
Common name of active ingredient CARBENDAZIM
Intended use For use only as a Horticultural Turf Treatment and Worm Control Agent
Company Identification **Scotts UK Professional**
The Scotts Company (UK) Limited
Paper Mill Lane
Bramford, Ipswich **Telephone +44 (0) 173 830 492**
Suffolk IP8 4BZ
Emergency Telephone 01865 407333 (24hr)

2. COMPOSITION / INFORMATION ON INGREDIENTS

NPK: Not applicable

Chemical Characterisation

<u>Chemical name</u>	<u>CAS-No</u>	<u>EINECS/ELINCS</u>	<u>Classification</u>	<u>Concentration</u>
Carbendazim	10605-21-7	234-232-0	Muta. Cat. 3: Xn: R50/53 R68	500g/l
Alkyl ether sulphate sodium salt	32612-48-9	-	R36/38	1.00<5.00%w/w
Ethanediol	107-21-1	203-473-3	Xn: R22	5<25%w/w

3. HAZARDS IDENTIFICATION

Health:



Harmful

General May produce an allergic reaction. Contains mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one. Possible risks of irreversible effects.

Ingestion Low toxicity

Eye contact May be slightly irritating

Skin contact May be slightly irritating

Inhalation Low toxicity

Environmental:



Dangerous for the environment

VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

4. FIRST AID MEASURES

General information Initial treatment should be symptomatic and supportive.

Inhalation Remove patient from source of contamination. Keep warm and at rest. Seek medical advice.

Skin contact Remove contaminated clothing. Wash skin immediately with soap and water. Contaminated clothing should be laundered before re-use. If irritation persists seek medical advice.

Eye contact Rinse immediately with clean water for at least 15 minutes. Seek medical advice.

Ingestion Rinse mouth with water. Seek immediate medical advice, show the container label if possible.

5. FIRE FIGHTING MEASURES

General hazard	Product is non-combustible.
Extinguishing media	Water fog, foam, carbon dioxide (CO ₂) or dry powder extinguishant.
Extinguishing media to avoid	Strong water jet.
Special exposure hazards	In the event of fire, the following can be released: nitrogen oxides (NO _x), carbon monoxide (CO), sulphur oxides.
Protective equipment	Self-contained breathing apparatus and suitable protective clothing.
Further information	Prevent fire water run-off from entering drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up	Wear suitable protective clothing (see section 8). Cover/absorb spillage with sand/earth or in a suitable inert material. Sweep up and transfer collected material into labelled containers, and keep for safe disposal (see also section 13).
Environmental considerations	Spillages or uncontrolled discharge into watercourses must be alerted to the appropriate regulatory body.

7. HANDLING & STORAGE

Advice on safe handling	Wear suitable protective clothing and suitable gloves (see section 8). In case of insufficient ventilation wear suitable respiratory equipment
Storage conditions	Store in original container, tightly closed, in a safe place. Store away from seeds, fertilisers and composts. Protect from frost.
Shelf life	At least 2 years when stored in unopened container at ambient temperatures.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls	Monitoring of the workplace should be considered in accordance with EH40 (or equivalent) controls. <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">LTEL (8 hour TWA):</td> <td style="width: 30%;">10mg/m³</td> <td style="width: 40%;">Particulate – ethanediol</td> </tr> <tr> <td>LTEL (8 hour TWA):</td> <td>52mg/m³</td> <td>Vapour - ethanediol</td> </tr> <tr> <td>STEL (15 min):</td> <td>104mg/m³</td> <td>Vapour - ethanediol</td> </tr> </table>	LTEL (8 hour TWA):	10mg/m ³	Particulate – ethanediol	LTEL (8 hour TWA):	52mg/m ³	Vapour - ethanediol	STEL (15 min):	104mg/m ³	Vapour - ethanediol
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STEL (15 min):	104mg/m ³	Vapour - ethanediol								
Personal protection	Engineering controls of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment: Wear suitable protective clothing (coveralls) when applying by vehicle mounted equipment. Wear suitable protective clothing (coveralls) suitable protective gloves, rubber boots and face protection (faceshield) when handling contaminated surfaces and applying by hand-held equipment. Wear suitable protective clothing (coveralls) suitable protective gloves and face protection (faceshield) when handling the concentrate. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection. In case of accidental spillage of bulk product, wear personal protective equipment appropriate to the task (see below)									
Eye protection	Faceshield									
Skin protection	Nitrile gloves									
Respiratory protection	Respirator, filter A/P2 (e.g. if ventilation is insufficient)									
Other protection	Protective overall and rubber boots.									

Product Name:**TURFCLEAR****Reference No: 021****9. PHYSICAL & CHEMICAL PROPERTIES**

Physical form	Liquid
Colour	Brown
Odour	Aromatic
pH	6.7 – 8.7 (10% suspension)
Boiling pt / range	Not available
Melting pt / range	Not determined
Flash point	>100°C
Flammability	Non-flammable
Density	1.19g/cm ³ at 20°C
Water solubility	Miscible
Additional information	None

10. STABILITY & REACTIVITY

Stability	Stable under normal conditions.
Conditions to avoid	Extremes of temperature.
Material to avoid	None known.
Hazardous reactions	None known.
Hazardous decomposition products	In the event of fire, the following can be released: nitrogen oxides (NO _x) carbon monoxide (CO)
Further information	None

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Oral LD ₅₀	>5,000mg/kg	Rat
	Dermal LD ₅₀	>5,000mg/kg	Rat
Inhalation	Low toxicity		
Skin irritation	Slight irritant effect		
Skin sensitisation	Non-sensitising (guinea pig) OECD 406, Buehler test. Contains mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.		
Eyes	Slight irritant		
Further information	Data suggestive of genotoxicity in vivo available. Active ingredient classified as a category 3		

12. ECOLOGICAL INFORMATION

Acute toxicity	LC ₅₀ (96hr)	0.52mg/l	Rainbow trout, <i>Oncorhynchus mykiss</i>
	EC ₅₀ (48hr)	0.26mg/l	Water flea <i>Daphnia magna</i>
	EC ₅₀ (72hr)	>100mg/l	Algae <i>Pseudokirchneriella subcapitata</i>
Degradability	Sparingly degradable (Active ingredient carbendazim)		
Further information	Dangerous for the environment. Avoid release into the environment. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.		

13. DISPOSAL CONSIDERATIONS

User	Do not contaminate surface water or ditches with chemical or used container. Wash out container thoroughly, empty washings into spray tank and dispose of safely.
Surplus bulk product / spillage	In accordance with national and local authority regulations, e.g. special waste (e.g. Special Waste Regulations) or incineration, after consultation with the operator.

14. TRANSPORT INFORMATION

United Nations number	3082
Proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S. (Carbendazim)
Class	9
Packing group	III
EmS	None
MFAG	None
Marine pollutant	Classified as Marine Pollutant
ADR item no	11 (c)
UK road category	3

15. REGULATORY INFORMATION

Classification & labelling This Safety Data Sheet does not form part of the label approved under the Control of Pesticide Regulations 1986.

To avoid risks to man and the environment, comply with the instructions for use.



HARMFUL

DANGEROUS
FOR THE
ENVIRONMENT

Current registration no.	UK	EIRE
	07506	91474
Previous registration no.	UK	
	02253	

Risk phrases DANGEROUS FOR THE ENVIRONMENT
VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
HARMFUL

Safety phrases / precautions (from the label)

Operator protection

WASH HANDS before meals and after work.

Engineering controls of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying by vehicle mounted equipment.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS AND FACE PROTECTION (FACESHIELD) when handling contaminated surfaces and applying by hand-held equipment.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

Environmental protection

DO NOT CONTAMINATE SURFACE WATER OR DITCHES with chemical or used container

Storage and disposal

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely. STORE IN ORIGINAL CONTAINER, tightly closed, in a safe place.

Do not breathe spray

This material and its container must be disposed of in a safe way

Wear suitable protective clothing and suitable gloves

In case of insufficient ventilation wear suitable respiratory equipment

Use appropriate containment to avoid environmental contamination.

Contains mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.

16. OTHER INFORMATION**Further information**

The Control of Substances Hazardous to Health Regulations (COSHH) may be applicable to the use of this product.

Risk phrases referred to in section 2 for composite ingredients.

R22: Harmful if swallowed

R36/38: Irritating to eyes and skin

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R68: Possible risk of irreversible effects

For further advice authorised persons (e.g. doctor) may contact the National Poisons Information Service Centre:

UK National number: 0870 600 6266

Eire (Dublin) 00 3531 8379964 or 00 3531 8379966

Sources of data

EH40/2002 and other suppliers' safety data sheets

Date of issue

March 2004

The information on this sheet is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product.

It is not applicable to unusual or non standard uses of the product nor where instructions or recommendations are not followed.