

Material Safety Data Sheet

Pure Turf

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

MAPP Number: **MAPP 14851**

Trade Name: Pure Turf

Recommended Uses: A fungicide for control of diseases in managed amenity turf (Golf course greens, tee boxes and 5% of the fairway).

Manufacturer/Supplier: Pure Amenity Ltd
12 Bridlington Rd
Stamford Bridge
East Riding of Yorkshire
YO41 1HA
United Kingdom

Telephone number: 0845 257 4710

e-mail: martin@pureamenity.co.uk

Emergency Telephone Nos: 0845 459 4039 [Pure Amenity 24 hrs.]
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:

HAZARDOUS COMPONENTS:

Component	CAS Reg. No.	EINECS ELINCS No.	Conc. % w/w	Risk Phrases*	Hazard Symbol
Iprodione	36734-19-7	253-179-9	25	R40 R50, 5	Xn, N
Polyarylphenyl ether phosphate	90093-37-1	-	1-20	R36	Xi
Tributyl phenol polyglycol ether	9046-09-7	-	0.1 – 2.5	R22, 41 R51, 53	Xn, N
1,2-propanediol	57-55-6	200-338-0	<1.0	-	-
Plus water to make up the balance					
* See Section 16 for details of risk phrases.					

3. Hazards Identification

Health Hazards: Limited evidence of carcinogenic effect

Environmental hazard in case of accident (spillage or leakage): Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.

4. First Aid Measures

General: Have the product container, label or Materials Safety Data Sheet with you when calling the Poisons Information Service, Pure Amenity, a physician or when going for medical treatment. Move out of contaminated area and place victim in the recovery position if necessary. Remove contaminated clothing and dispose of safely.

Skin Contact: Wash immediately with plenty of water, or if available polyethylene glycol and then water. Remove contaminated clothing and wash thoroughly before re-use.

Eye Contact: Rinse immediately with plenty of water for at least 15 minutes, including under eyelids. Remove contact lenses if worn.

Inhalation: Remove patient to fresh air. Keep the patient warm and at rest. If breathing is irregular or has stopped, administer artificial respiration. Call a physician if symptoms persist.

Ingestion: If swallowed rinse mouth with clean water and dispose of residues safely. Contact a physician immediately and show them this MSDS or the label. DO NOT induce vomiting.

Note to medical staff: There is no specific antidote. Treat symptomatically. Gastric lavage is not normally required, but if more than one mouthful has been ingested, administer activated charcoal and sodium sulphate.

5. Fire-fighting measures:

Extinguishing Media for fires: For small fires use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. For large fires use an alcohol-resistant foam or water spray. DO NOT use a solid water stream as this may scatter and spread the fire.

Specific hazards during fire-fighting: During a fire the smoke will be produced as the product contains flammable organic components. This smoke will contain of combustion which are toxic (carbon monoxide, hydrogen chloride and nitrous oxides). Evacuate downwind.

Special protective equipment for fire-fighters: Wear full protective clothing and self-contained breathing apparatus. DO NOT breathe fumes.

Further Information: Contain fire-fighting water with sand or some such bunding material to prevent entry to drains or water courses. Avoid breathing smoke. Cool closed containers exposed to the fire with a water spray.

6. Accidental release measures:

Personal precautionary measures: Wear the personal protective equipment outlined in section 8 below. Remove contaminated clothing immediately. Wash skin area with soap and water. Wash clothing before re-use.

Environmental protection measures: Keep the area isolated and do not allow contamination to enter drains or waterways. Prevent further leakage if safe to do so. Spillage

or uncontrolled discharges into watercourses must be alerted to the National Rivers Authority or Environmental Agency (Tel: 0800 807060).

Procedures for cleaning/absorption: Soak up with earth, sand or other non-combustible absorbent material using mechanical handling equipment and place in containers for disposal according to local/national regulations (see section 13). Clean contaminated floors and objects thoroughly and dispose of cleaning equipment safely. For large spillages, barricade the area and consult the manufacturer.

7. Handling and storage:

Handling: Use the personal protective clothing detailed in section 8. Avoid contact with skin or eyes. When using, do not eat, drink or smoke and wash hands and skin after work.

Storage: Store in a cool dry and well-ventilated place in the original containers and protect from excessive heat or cold. Keep in an area accessible to authorised personnel only. Store away from food, drink and animal feeding stuffs.

Additional information: The product is stable for at least two years when stored at ambient temperatures in the unopened container. Ensure temperature does not exceed 40°C.

8. Exposure controls/Personal protection:

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

Components	Exposure limits	Values
Iprodione	2 mg/m ³	-
Propane-1,2-diol (particulates)	10 mg/m ³	8 hr TWA
Propane-1,2-diol (Total vapour and particulates)	2 mg/m ³ ; 150 ppm	8 hr TWA

Engineering measures to reduce exposure: Engineering controls to avoid exposure are preferable to personal protective equipment where practically feasible to use. Assess the exposure and deploy additional measures if there is a change the relevant exposure limit may be exceeded.

Personal protective equipment: Keep work clothes separate from other clothing. Clothing that cannot be cleaned should be burned. When using, wear a standard coverall and a type 6 suit. Polyester or cotton overalls should be worn under the chemical-resistant suit and should be professionally laundered at frequent intervals. In addition use the following personal protective equipment.

Eye protection: Follow local site procedure. Eye protection in the form of goggles or face shield is recommended and when used, should comply with EN 166 certification.

Hand protection: Chemical-resistant gloves made of nitrile rubber are needed with a breakthrough time appropriate to the length of exposure (minimum thickness 0.4mm). Wash contamination from the gloves immediately on the inside. Wash hands before eating, drinking or smoking and before using the toilet.

Respiratory protection: Under normal usage respiratory protection is not necessary. A filter respirator with a pesticide canister can be used to control residual until effective local exhaust ventilation is in operation. Note that these provide limited protection and in the event of an

emergency spillage or where the exposure level is unknown, self-contained breathing apparatus should be used.

Skin and body protection: Wear suitable protective clothing based on the potential risk exposure over normal clothes to provide two barriers. When finished, wash with soap and water after removing the clothing. Take a shower if necessary. Decontaminate clothing before reuse or use disposable clothing. Do not eat, drink or smoke while working.

9. Physical and chemical properties:

Appearance:	Liquid.
Formulation:	Suspension concentrate
Colour:	Green.
pH value:	3 - 5 @1% (20°C)
Flash point:	> 100°C; no flash point up to boiling point
Density:	1.02 g/ml at 20°C
Density viscosity:	40 – 100 mPas at 20°C
Water solubility:	Dispersible in water

10. Stability and reactivity:

Hazardous decomposition products: Combustion or thermal decomposition will result in the release of carbon monoxide, hydrogen chloride and nitrous oxide

Hazardous reactions: Stable under normal conditions and hazardous polymerisation does not occur.

Conditions to avoid: Extremes of temperature and direct sunlight

11. Toxicological information:

Oral toxicity (LD50):	>2000 mg/kg (rat)
Acute dermal toxicity (LD50):	>2000 mg/kg (rabbit).
Skin irritation:	Not irritating to skin
Eye irritation:	Not irritating to eyes (rabbit).
Sensitisation:	Non-sensitising to skin

12. Ecological information:

Ecotoxicological effects:

Toxicity to fish (LC50):	24 mg/l (<i>Onchorhynchus mykiss</i> [rainbow trout]). Exposure time 96 hours.
Toxicity to algae (EbC50):	12.8 mg/l (<i>Scenedesmus subspicatus</i> [green algae]). Exposure time 72 hours.

Toxicity to aquatic invertebrates (EC50): 0.25 mg/l (*Daphnia magna* [water flea])*.
Exposure time 48 hours.

Value refers to the toxicity of the active ingredient

13. Disposal considerations:

Waste from residues and unused product: In accordance with current regulations after consultation with a disposal site operator and/or the responsible authority, this product may be taken to a waste disposal site or an incineration plant.

Contaminated packaging: Empty containers and triple rinse. 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. Large containers (> 25 Litres): Do not rinse. Return large containers to suppliers. Do not reuse container for any purpose.

Waste key for unused product: 020108 – agrochemical waste containing dangerous substances

14. Transport information:

LAND/SEA/AIR (RID / ADR / IMDG / IATA*)

	Labels	UN Number	Packaging group
	9	3082	III
Description of goods:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IPRODINE SOLUTION).		
Hazard no:	90		
EmS:	F-A; S-F		
Marine pollutant:	Yes		
Emergency action code:	3Z.		

15. Regulatory information:

This product has been classified according to 'The Chemical (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3 and any subsequent amendments'. This product is classed as dangerous according to EC Directive on dangerous preparations 1999/45/EC

Hazardous components which must be listed on the label:

- Iprodione
- Propane-1,2-diol

Hazard symbol/Classification :	Xn N	Harmful DANGEROUS FOR THE ENVIRONMENT
Risk phrases (R):	R40	Limited evidence of carcinogenic effect

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

Safety phrases:

S2 Keep out of reach of children.
S13 Keep away from food, drink and animal feed.
S35 This material and its container must be disposed of in a safe way.
S35/36 Wear suitable protective clothing and gloves
S46 If swallowed seek medical advice immediately and show this container or label
S57 Use appropriate containment to avoid environmental contamination.

Special note:

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

16. Other information:

Health and Environmental Hazards:

Text of R phrases mentioned in Section 2.

Risk phrases (R)

R22 Harmful if swallowed.
R36 Irritating to eyes.
R40 Limited evidence of carcinogenic effect
R41 Risk of serious damage to eyes
R50/53 Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.

Date of first issue:

8th September 2009

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.