



Special exposure hazards	For large fire : Water spray, water fog, foam : Thermal decomposition generates : nitrogen oxides, carbon dioxide, carbon monoxide, chlorides.
Protection against fire	: Wear proper protective equipment. Self-contained breathing apparatus.
Special procedures	: Fight fires from a protected location. Dike fire control water for later disposal
6. ACCIDENTAL RELEASE MEASURES	
Personal precautions	: Use appropriate protection (see section 8).
Environmental precautions	: Dispose of this material and its container at hazardous or special waste collection point, In accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out.
After spillage and/or leakage	: In the event of minor spillage: Absorb in sand or other inert material. Use appropriate containment to avoid environmental contamination. In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.
7. HANDLING AND STORAGE	
Handling	: Do not breathe fumes. Avoid contact with skin and eyes.
Storage	: Keep locked up Keep container tightly closed. Keep only in the original container in a cool, well ventilated place. Keep at temperature not exceeding 50°C.
Packing	: Coextruded or fluorinated polyethylene containers.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
Industrial hygiene	: Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Wash hands thoroughly after handling. Wash clothing before re-using.
Personal protection	
- Respiratory protection	: During spraying wear suitable respiratory equipment.
- Skin protection	: Wear suitable protective clothing, and chemical resistant boots .
- Hand protection	: Wear suitable gloves.
- Eye protection	: Chemical goggles or face shield.

Occupational Exposure Limits TLV-TWA [mg/m3]	: (USA) Tebuconazole : Not established : (USA) Prochloraz : Not established
9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical state	: Liquid
Colour	: Yellowish
Odour	: characteristic
Density	: 1.08-1.10 g/ml
Solubility in water	: Emulsifiable
Log P octanol	: Tebuconazole : 3.7 Prochloraz : 4.06
Flammability	: Not flammable
Explosion limits	: Not explosive
10. STABILITY AND REACTIVITY	
Physico-chemical stability	: Stable under normal conditions.
Hazardous decomposition products	: Thermal decomposition generates : nitrogen oxides, carbon monoxide, carbon dioxide, chlorides.
Hazardous reactions	: Avoid contact with : strong acids, strong bases.
Hazardous	: Will not occur.
Polymerization	
Conditions to avoid	: Protect from sunlight, open flame and sources of heat. Decomposes upon heating.
11. TOXICOLOGICAL INFORMATION	
Rat oral LD50 [mg/kg]	: >2,000
Rat dermal LD50 [mg/kg]	: >2,000
Rat inhalation LC50 [mg/l/4h]	: > 5.35
Skin corrosion/ irritation	: Not irritating
Serious eye damage / irritation	: Irritant
Respiratory or skin sensitization	: Non sensitizer

Carcinogenicity	: Not carcinogenic
Germ cell mutagenicity	: Not mutagenic
Reproductive toxicity	: Repr. Cat. 3: Possible risk of harm to the unborn child.
12. ECOLOGICAL INFORMATION	
96 H-LC50 - Rainbow trout [mg/l]	: 1.77
48 H-EC50 - Daphnia magna [mg/l]	: 12
72 H-EbC50 - Algae [mg/l]	: 0.410
72 H-ErC50 - Algae [mg/l]	: 3.44
LD50 Birds [mg/kg]	: > 2000
Birds LC50 [mg/kg]	: > 2000
Bees LD50 [µg/Bee]	: oral : 58.1, contact : 74.6
13. DISPOSAL CONSIDERATIONS	
Disposal	: Dispose in a safe manner in accordance with local/national regulations.
14. TRANSPORT INFORMATION	
- UN No.	: 3082
- Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (267 g/l PROCHLORAZ + 133 g/l TEBUCONAZOLE)
- Packing group	: III
- Class	: 9
- H.I. nr :	: 90
- IMDG-Marine pollution:	: Yes
15. REGULATORY INFORMATION	
EU Classification	: This product is provisionally labelled by the supplier in accordance to the EU regulations;
Symbol(s)	 
	:Xn: Harmful. N: Dangerous for the environment.

R Phrase(s)	: R22 - Harmful if swallowed R36 - Irritating to eyes. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R63 - Possible risk of harm to the unborn child.
S Phrase(s)	: S02 - Keep out of the reach of children. S13 - Keep away from food, drink and animal feedingstuffs. S20/21 - When using, do not eat, drink or smoke. S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 - Wear suitable protective clothing, gloves and eye / face protection. S61 - Avoid release to the environment. Refer to special instructions / Safety data sheets.
16. OTHER INFORMATION	
Recommended uses and restrictions	: None.
Text of R-phrases in heading 2	: R22 - Harmful if swallowed. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R63 - Possible risk of harm to the unborn child.
Print date	: 11 / 10 / 2011
DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.	
JUL 12	



An emulsion, oil in water formulation containing 133 g/l (12% w/w) tebuconazole and 267 g/l (24% w/w) prochloraz.

THROTTLE™ MAPP 13900

THROTTLE is a systemic fungicide for the control of Fusarium patch in managed amenity turf

SAFETY PRECAUTIONS
Operator Protection
 Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS AND FACE PROTECTION (FACESHIELD) when handling the concentrate.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when applying by hand-held equipment.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying by vehicle mounted or trailed equipment.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.
 However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
WHEN USING DO NOT EAT, DRINK OR

SMOKE.
WASH CONCENTRATE from skin or eyes immediately.
WASH HANDS AND EXPOSED SKIN before meals and after work.
IF YOU FEEL UNWELL, seek medical advice (show the label where possible).

Environmental Protection
DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

Storage and Disposal
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.
KEEP OUT OF REACH OF CHILDREN.
KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.
WASH OUT CONTAINER THOROUGHLY empty washings into spray tank and dispose of safely.
DO NOT RE-USE CONTAINER for any purpose.

The COSHH (Control of Substances Hazardous to Health) Regulations may apply to the use of this product at work.

THROTTLE™ is a trade mark of Makhteshim-Agan (UK) Ltd.
 Unit 15, Thatcham Business Village, Colthrop Way, Thatcham, Berkshire, RG19 4LW
 Tel: 01635 860555 Technical Helpline: 01635 876 622 www.mauk.co.uk

PROTECT FROM FROST
 SHAKE WELL BEFORE USE

Batch Number: see packaging
 The Voluntary Initiative
 Promoting responsible pesticide use

0.8 Litre e

For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333.
 This label is compliant with the CPA Voluntary Initiative Guidance

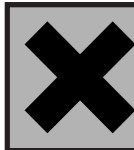



This leaflet/booklet is part of the approved product label

IMPORTANT INFORMATION FOR PROFESSIONAL USE ONLY AS A HORTICULTURAL FUNGICIDE			
Crops	Maximum individual dose(litres product/ha)	Maximum number of applications	Latest time of application
Managed amenity turf	1.6	2 per year	-
Other specific restrictions: Non-returnable containers must not be used for any purpose.			
READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.			

THROTTLE™ (MAPP 13900)

An emulsion, oil in water formulation containing 133 g/l (12% w/w) tebuconazole and 267 g/l (24% w/w) prochloraz.

	HARMFUL IF SWALLOWED IRRITATING TO EYES		VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT
HARMFUL	POSSIBLE RISK OF HARM TO THE UNBORN CHILD	DANGEROUS FOR THE ENVIRONMENT	

WEAR SUITABLE PROTECTIVE CLOTHING.
WEAR SUITABLE GLOVES.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY.
USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION
TO AVOID RISKS TO MAN AND THE ENVIRONMENT, COMPLY WITH THE INSTRUCTIONS FOR USE.

SAFETY PRECAUTIONS
Operator Protection
Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS AND FACE PROTECTION (FACESHIELD) when handling the concentrate.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when applying by hand-held equipment.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying by vehicle mounted or trailed equipment.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.
However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
WHEN USING DO NOT EAT, DRINK OR SMOKE.
WASH CONCENTRATE from skin or eyes immediately.
WASH HANDS AND EXPOSED SKIN before meals and after work.
IF YOU FEEL UNWELL, seek medical advice (show the label where possible).

Environmental Protection
DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.
Storage and Disposal
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.
KEEP OUT OF REACH OF CHILDREN.
KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.
WASH OUT CONTAINER THOROUGHLY empty washings into spray tank and dispose of safely.
DO NOT RE-USE CONTAINER for any purpose.

DIRECTIONS FOR USE
IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

RESTRICTIONS
Do not apply when the turf is under stress, such as drought, waterlogging and extremes of hot and cold temperatures.

Resistance Management
To avoid resistance do not apply repeated applications of THROTTLE alone on the same crop against the same disease. In such situations use an appropriate tank mix or alternate with another fungicide with a different mode of action. Where resistance occurs, THROTTLE may not give adequate disease control. Consult the latest advice from FRAG UK and FRAC regarding disease resistance strategies.

THROTTLE may be used on established turf including golf courses, lawns (in commercial and residential situations), sports fields, parks and cemeteries

CROP SPECIFIC INFORMATION INCLUDING DISEASES CONTROLLED

	Rate of use and volume of water		
Diseases	Knapsack sprayer	Tractor mounted hydraulic sprayer	Timing and Recommendations
Fusarium patch	<u>100m²</u> 16 mls in 2-5 litres water <u>500m²</u> 80 mls in 10-25 litres water	1.6 l/ha in 200-500 litres water/ha	Apply as soon as disease appears, or in the early stages of disease development. Repeat once if necessary with an interval of at least 14 days.

APPLICATION
Mixing
Before spraying it is important to check all hoses, filters and nozzles, and to ensure that the sprayer is clean and correctly set to give an even application at the correct volume.
Half fill the spray tank with clean water. Add the required quantity of THROTTLE and begin agitation. Add the remainder of water. Continue agitation during spraying. Do not allow the spray mixture to stand in the sprayer tank.

CONDITIONS OF SUPPLY
All products supplied by us are of high grade and conform to specification at the time of delivery but, as

we cannot exercise control over their subsequent storage, handling, mixing or use or the weather conditions before, during and after application which may affect the performance of the products, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our products are excluded and no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such products.

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Email: admin@mauk.co.uk

For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333.

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MATERIAL SAFETY DATA SHEET
THROTTLE

This Safety Data Sheet does not form part of the approved label.
Following the instructions on the pesticide Product Label for the specified uses should ensure that the product is used safely and efficaciously for those uses.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade name : THROTTLE
Type of product : Fungicide
Chemical formula : Tebuconazole : C16H22ClN3O
Prochloraz : C15H16Cl3N3O2

Company identification : Irvita Plant Protection
Pos Cabai Office Park, Unit 13, P.O.Box 403
Curaçao Netherlands Antilles
Tel: 599-9-738-4096 / 738-4040 Fax: 599-9-738-4005
MSDS@ma-industries.com

Emergency phone nr : 972-3-6106666 Subscription no. 36789 (Makhteshim)

2. HAZARDS IDENTIFICATION
Human Health Hazards : Harmful if swallowed.

Irritating to eyes.
Possible risk of harm to the unborn child.
Environmental hazard : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is considered to be hazardous and contains hazardous components.

Substance name	Value(s)	CAS No	EC No	Index No	Classification
Prochloraz	267 g/l	67747-09-5	266-994-5	613-128-00-2	Xn; R22 N; R50-53
Tebuconazole	133 g/l	107534-96-3	403-640-2	603-197-00-7	Repr. Cat. 3; R63 Xn; R22 N; R51-53

4. FIRST AID MEASURES

First aid
Ingestion : Do not induce vomiting. Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediately consult a doctor.
Skin contact : Remove affected clothing and wash all exposed skin area with soap and water, followed by warm water rinse.
Eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Consult an eye specialist.
Inhalation : Remove victim to fresh air. Consult a doctor in the event of any complaints.
Note to physician : No specific antidote known. Treat symptomatically and give supportive therapy. If ingested perform gastric lavage and administer activated charcoal.

5. FIRE-FIGHTING MEASURES
Extinguishing media : For small fire : Dry chemical, water fog. carbon dioxide.