



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Timpani

Version 1 (UK)

Issuing date: 2014/11/25

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

1.1. Product identifier

Trade name : **Timpani**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : fungicide

1.3. Details of the supplier of the safety data sheet

Nufarm UK Limited
Wyke Lane
Wyke
Bradford
West Yorkshire BD12 9EJ
United Kingdom
Telephone: +44 (0)1274 691234
Telefax: +44 (0)1274 691176
E-mail address: infouk@uk.nufarm.com

1.4. Emergency telephone number

+44 (0)1274 696603

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

EEC/99/45 :	T+	R26 - Very toxic by inhalation.
	Xi	R37 - Irritating to respiratory system.
	Xn	R40 - Limited evidence of a carcinogenic effect.
	Xi	R41 - Risk of serious damage to eyes.
	Xi	R43 - May cause sensitization by skin contact.
	Xn	R63 - Possible risk of harm to the unborn child.
	N	R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
EG_1272/08 :	AcuteTox.2	H330 - Fatal if inhaled.
	Eyelrrit.2	H319 - Causes serious eye irritation.
	SkinSens.1	H317 - May cause an allergic skin reaction.
	STOT_SE3	H335 - May cause respiratory irritation.
	Carc.2	H351 - Suspected of causing cancer.
	Repr.2	H361d - Suspected of damaging the unborn child.
	AquaticAcute1	H400 - Very toxic to aquatic life.
	AquaticChronic1	H410 - Very toxic to aquatic life with long lasting effects.

2.2. Label elements

according directive 1999/45/EG

Pictogram:



T+



N

- R26 - Very toxic by inhalation.
- R37 - Irritating to respiratory system.
- R40 - Limited evidence of a carcinogenic effect.
- R41 - Risk of serious damage to eyes.
- R43 - May cause sensitization by skin contact.
- R63 - Possible risk of harm to the unborn child.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- S23 - Do not breathe gas/fumes/vapour/spray.
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S28 - After contact with skin, wash immediately with plenty of water.
- S35 - This material and its container must be disposed of in a safe way.
- S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
- S38 - In case of insufficient ventilation, wear suitable respiratory equipment.
- S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S57 - Use appropriate container to avoid environmental contamination.

REGULATION (EC) No 1272/2008

Pictogram:



GHS07



GHS06



GHS08



GHS09



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Signal word: Danger

- H330 - Fatal if inhaled.
H319 - Causes serious eye irritation.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.
H351 - Suspected of causing cancer.
H361d - Suspected of damaging the unborn child.
H410 - Very toxic to aquatic life with long lasting effects.
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.
- P261 - Avoid breathing vapours or spray.
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
P310 - Immediately call a POISON CENTER or doctor/ physician.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P332 + P313 - If skin irritation occurs: Get medical advice/ attention.
P308 + P313 - IF exposed or concerned: Get medical advice/ attention.
P337 + P313 - If eye irritation persists: Get medical advice/ attention.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/ container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non hazardous waste.

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : suspension concentrate (SC)
250 g/L Chlorothalonil + 90 g/L Tebuconazole

3.2. Mixtures

Components:

Tebuconazole

CAS-No.: 107534-96-3
EINECS-No. / ELINCS No.: 403-640-2
REACH No.:
Concentration: 7.92 % (w/w)



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Classification:

EG_1272/08 :	Repr.Cat.2 AcuteTox.4 AquaticChronic2	H361 - Suspected of damaging fertility or the unborn child. H302 - Harmful if swallowed. H411 - Toxic to aquatic life with long lasting effects.
EEC/67/548 :	Repr.Cat.3 Xn N	R63 - Possible risk of harm to the unborn child. R22 - Harmful if swallowed. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chlorothalonil

CAS-No.:	1897-45-6
EINECS-No. / ELINCS No.:	217-588-1
REACH No.:	
Concentration:	22.0 % (w/w)

Classification:

EG_1272/08 :	Carc.Cat.2 AcuteTox.2 STOT_SE3 EyeDam.1 SkinSens.1 AquaticAcute1 AquaticChronic1 (M=10)	H351 - Suspected of causing cancer. H330 - Fatal if inhaled. H335 - May cause respiratory irritation. H318 - Causes serious eye damage. H317 - May cause an allergic skin reaction. H400 - Very toxic to aquatic life. H410 - Very toxic to aquatic life with long lasting effects. - - -
EEC/67/548 :	Carc.Cat.3 T+ Xi Xi - N	R40 - Limited evidence of a carcinogenic effect. R26 - Very toxic by inhalation. R37 - Irritating to respiratory system. R41 - Risk of serious damage to eyes. R43 - May cause sensitization by skin contact. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Propane-1,2-diol

CAS-No.:	57-55-6
EINECS-No. / ELINCS No.:	200-338-0
REACH No.:	01-2119456809-23
Concentration:	6.6 % (w/w)

Classification:

EG_1272/08 :	-	n.c. - This chemical substance is not classified in the Annex VI of Regulation (EC) No 1272/2008.
EEC/67/548 :	-	n.c. - This chemical substance is not classified in the Annex I of Directive 67/548/EEC.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Eye contact	:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin contact	:	Remove and wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician.
Inhalation	:	Remove casualty to fresh air. Oxygen or artificial respiration if needed. Obtain medical attention.



Ingestion : Do NOT induce vomiting. If conscious, drink plenty of water. Obtain medical attention. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Hazards : No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Water spray, Carbon dioxide (CO₂), Alcohol-resistant foam, Dry powder

Extinguishing media which shall not be used for safety reasons : High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : In the event of fire (HCl, Cl₂, NO_x, CO) may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. (see Chapter 8) Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up



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Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

6.4. Reference to other sections

see Chapter 13

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice : Wear personal protective equipment. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep in a well-ventilated place. Keep out of reach of children.

Advice on common storage : Keep away from food and drink. Keep out of reach of children.

7.3. Specific end use(s)

none

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters
(EH40/2005 Workplace exposure limits)

Components	CAS-No.	National occupational exposure limits	Note
Tebuconazole	107534-96-3		no classification available
Chlorothalonil	1897-45-6		no classification available
Propane-1,2-diol	57-55-6	474 mg/m ³	Vapour and particulates, Long-term exposure limit

8.2. Exposure controls

Personal protective equipment

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection : PVC or nitrile-rubber gloves



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Eye protection : Goggles, , or:, Safety glasses
Skin and body protection : protective suit
Hygiene measures : Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Physical state : liquid
Colour : light grey
Auto-ignition temperature : >400 °C
Density : 1.136 g/cm³
pH : 8.1
Partition coefficient: n-octanol/water : log POW = 3.7
at 20 °C
(Tebuconazole)
log POW = 2.94
at 25 °C
(Chlorothalonil)
Surface tension : 34.4 mN/m
at 20 °C

9.2. Other information

none

10. STABILITY AND REACTIVITY

10.1. Reactivity

no data available



10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

No dangerous reaction known under conditions of normal use.

10.5. Incompatible materials to avoid

Oxidizing agents, Strong bases

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute oral toxicity : LD50 rat
Dose: > 2,000 mg/kg

Acute dermal toxicity : LD50 rat
Dose: > 2,000 mg/kg

Acute inhalation toxicity : LC50 rat
Exposure time: 4 h
Dose: 0.1 mg/l
Test substance: (Chlorothalonil)

Skin irritation : rabbit
Classification: No skin irritation
Result: Mild skin irritation

Eye irritation : rabbit
Classification: No eye irritation
Result: Mild eye irritation

Sensitisation : Local Lymph Node Assay mouse
Classification: May cause sensitization by skin contact.
Result: Causes sensitization.



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Carcinogenicity : Carc.Cat.3 (Tebuconazole)

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity to birds : LD50 *Anas platyrhynchos* (Mallard duck)
Dose: 4,640 mg/kg
Test substance: (Chlorothalonil)

: LC50 *Anas platyrhynchos* (Mallard duck)
Dose: > 4,816 mg/kg
Testing period: 5 d
Test substance: (Tebuconazole)

Toxicity to bees : LD50 *Apis mellifera* (Honey bee)
Testing period: 2 d
Dose ($\mu\text{g}/\text{Species}$): 393.9

Toxicity to fish : LC50 *Oncorhynchus mykiss* (Rainbow trout)
Dose: 0.047 mg/l
Testing period: 96 h
Test substance: (Chlorothalonil)

LC50 *Oncorhynchus mykiss* (Rainbow trout)
Dose: 4.4 mg/l
Testing period: 96 h
Test substance: (Tebuconazole)

Toxicity to daphnia : LC50 *Daphnia magna* (Water flea)
Dose: 0.07 mg/l
Testing period: 48 h
Test substance: (Chlorothalonil)

LC50 *Daphnia*
Dose: 4.2 mg/l
Testing period: 48 h
Test substance: (Tebuconazole)

Toxicity to algae : EC50 Toxicity to algae
Dose: 0.0051 mg/l



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Exposure time: 72 h
Test substance: (Chlorothalonil)

ErC50 Toxicity to algae
Dose: 3.8 mg/l
Exposure time: 72 h
Test substance: (Tebuconazole)

12.2. Persistence and degradability

Biodegradability : Not readily biodegradable.
Test substance: (Tebuconazole)

Not readily biodegradable.
Test substance: (Chlorothalonil)

12.3. Potential bioaccumulation

Bioaccumulation : Does not bioaccumulate.

12.4. Mobility in soil

Kfoc = 769 ml/g, 1/n=0.84 (Tebuconazol, arithmetic mean from 9 data sets)
Koc = 300 - 7000 l/kg (Chlorothalonil)

12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6. Other adverse effects

none

13. DISPOSAL CONSIDERATIONS

According to European Directive 2000/532/EC as amended :
Waste Code : 02 01 08 (agrochemical waste containing dangerous substances)

13.1. Waste treatment methods

Product : Dispose of product and packaging in accordance with The Green Code. (The Code of Practice for the safe use of Pesticides on Farms and Holdings.) A MAFF Publication.



Contaminated packaging : Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1. UN number

UN2902

14.2. Proper shipping name

UN2902 PESTICIDE, LIQUID, TOXIC, N.O.S.*(Chlorothalonil)

14.3. Transport hazard class(es)

ADR/RID :
Class : 6.1

IMDG :
Class : 6.1

IATA-DGR :
Class : 6.1

14.4. Packaging group

ADR/RID : II

IMDG : II

IATA-DGR : II

14.5. Environmental hazards

IMDG
Marine Pollutant : Y

14.6. Special precautions for user

none



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15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws.

15.2. Chemical Safety Assessment

none

16. OTHER INFORMATION

Print Date : 2014/11/25

The date format YYYY/MM/DD is used according to ISO 8601.
(Alterations are indicated in the left hand margin by: ||)

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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