



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Crafter

Version 1 (UK)

Issuing date: 2015/07/29

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

1.1. Product identifier

Trade name : **Crafter**

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 :	Xn	R20 - Harmful by inhalation.
	Xi	R37 - Irritating to respiratory system.
	Xn	R40 - Limited evidence of a carcinogenic effect.
	Xi	R43 - May cause sensitization by skin contact.
	Xn	R63 - Possible risk of harm to the unborn child.
	N	R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
EG_1272/08 :	AcuteTox.4	H332 - Harmful 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:



N



Xn

- R37 - Irritating to respiratory system.
R40 - Limited evidence of a carcinogenic effect.
R43 - May cause sensitization by skin contact.
R63 - Possible risk of harm to the unborn child.
R20 - Harmful by inhalation.
R50/53 - Very 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



GHS08



GHS09

Signal word: Warning

- | | |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H332 | - Harmful 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. |
| EUH208 | - Contains mixture of 5-chloro-2-methyl-2H-isothiazole-3-one + 2-methyl-2H-isothiazole-3-one. May produce an allergic reaction. |
| P261 | - Avoid breathing vapours or spray. |
| P280 | - Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P302 + P352 | - IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 | - IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P308 + P313 | - IF exposed or concerned: 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. |
| P271 | - Use only outdoors or in a well-ventilated area. |
| P305 + | - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact |



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P351 + lenses, if present and easy to do. Continue rinsing.
P338
P391 - Collect spillage.

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)

Classification:

EG_1272/08 : AcuteTox.4 H302 - Harmful if swallowed.
Repr.2 H361d - Suspected of damaging the unborn child.
AquaticChronic2 H411 - Toxic to aquatic life with long lasting effects.

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 H351 - Suspected of causing cancer.
AcuteTox.2 H330 - Fatal if inhaled.
STOT_SE3 H335 - May cause respiratory irritation.
EyeDam.1 H318 - Causes serious eye damage.
SkinSens.1 H317 - May cause an allergic skin reaction.
AquaticAcute1 H400 - Very toxic to aquatic life.
AquaticChronic1 H410 - Very toxic to aquatic life with long lasting effects.
(M=10) - - -

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.



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



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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

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



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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
- 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



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(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



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Acute inhalation toxicity	:	LC50 rat Exposure time: 4 h Dose: 1.12 mg/l
Skin irritation	:	rabbit Classification: No skin irritation Result: Mild skin irritation
Eye irritation	:	rabbit Classification: Irritating to eyes. Result: Irritating to eyes.
Sensitisation	:	Local Lymph Node Assay mouse Classification: May cause sensitization by skin contact. Result: Causes sensitization.
Carcinogenicity	:	Carc.Cat.2

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity to birds	:	LD50 <i>Anas platyrhynchos</i> (Mallard duck) Dose: 4,640 mg/kg Test substance: (Chlorothalonil)
	:	LC50 <i>Colinus virginianus</i> (Bobwhite Quail) Dose: 1,988 mg/kg Testing period: 5 d Test substance: (Tebuconazole)
Toxicity to bees	:	LD50 <i>Apis mellifera</i> (Honey bee) Testing period: 2 d Dose (μ g/Species): 393.9
Toxicity to fish	:	LC50 <i>Oncorhynchus mykiss</i> (Rainbow trout) Dose: 0.307 mg/l Testing period: 96 h
	:	LC50 Toxicity to fish Dose: 0.013 mg/l Testing period: 96 h



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Test substance: (Chlorothalonil)

LC50 Oncorhynchus mykiss (Rainbow trout)

Dose: 4.4 mg/l

Testing period: 96 h

Test substance: (Tebuconazole)

Toxicity to daphnia : EC50 Daphnia magna (Water flea)
Dose: 0.512 mg/l
Testing period: 48 h

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 Pseudokirchneriella subcapitata
Dose: 4.44 mg/l
Exposure time: 72 h

EC50 Toxicity to algae

Dose: 0.0051 mg/l

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



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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 "Code of practice for using plant protection products". A DEFRA publication

Contaminated packaging : Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1. UN number

UN3082

14.2. Proper shipping name

UN3082 Environmentally hazardous substance, liquid, n.o.s.(Chlorothalonil, Tebuconazole)

14.3. Transport hazard class(es)



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ADR/RID :
Class : 9

IMDG :
Class : 9

IATA-DGR :
Class : 9

14.4. Packaging group

ADR/RID : III

IMDG : III

IATA-DGR : III

14.5. Environmental hazards

IMDG
Marine Pollutant : Y

14.6. Special precautions for user

none

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 : 2015/07/29

The date format YYYY/MM/DD is used according to ISO 8601.



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(Alterations are indicated in the left hand margin by: ||)

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