

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture  
Name : Nourish and Protect Clear Universal  
Product code : BARNPCU

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Main use category : Consumer use, Professional use, Industrial use  
Use of the substance/mixture : Wood Treatment

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet**

Barrettine  
Barrettine Works  
St Ivel Way  
Warmley  
Bristol  
BS30 8TY

Tel: +44 (0) 1179 600060 Office hours only 8am–5pm Mon–Thurs. 8am-4.30pm Fri

Fax: +44 (0) 1179 352437

Email: sales@barrettine.co.uk

**1.4. Emergency telephone number**

Emergency number : +44 (0) 1270 502891 (Out of Office Hours Emergency Number)

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964	
United Kingdom	National Poisons Information Service (NHS Direct)	<a href="http://www.npis.org">http://www.npis.org</a>	111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland)	

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aspiration hazard, Category 1 H304

Hazardous to the aquatic environment — Acute Hazard, Category 1 H400

Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of hazard classes and H-statements : see section 16

**Adverse physicochemical, human health and environmental effects**

May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

**2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS08

GHS09

Signal word (CLP) : Danger

Hazardous ingredients : hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics, 3-iodoprop-2-yn-1-yl butylcarbamate, propiconazole, permethrin (ISO)

Hazard statements (CLP)	: H304 - May be fatal if swallowed and enters airways H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand P102 - Keep out of reach of children P273 - Avoid release to the environment P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor P331 - Do NOT induce vomiting P391 - Collect spillage P405 - Store locked up P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
EUH-statements	: EUH066 - Repeated exposure may cause skin dryness or cracking

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(EC no) 918-481-9 (REACH-no) 01-2119457273-39	>= 80	Asp. Tox. 1, H304
dipropylene glycol monomethyl ether substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, ES, FI, FR, GB, GR, HU, IE, IT, LT, LV, MT, NL, PL, PT, RO, SE)	(CAS No) 34590-94-8 (EC no) 252-104-2	1 - 5	Not classified
propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole	(CAS No) 60207-90-1 (EC no) 262-104-4 (EC index no) 613-205-00-0	0,1 - 1	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate	(CAS No) 55406-53-6 (EC no) 259-627-5 (EC index no) 259-627-5	0,1 - 1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cyclohexanone oxime substance with national workplace exposure limit(s) (LT, LV)	(CAS No) 100-64-1 (EC no) 202-874-0	0,1 - 1	Acute Tox. 4 (Oral), H302
permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	(CAS No) 52645-53-1 (EC no) 258-067-9 (EC index no) 613-058-00-2	< 0,1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=1000)
2,2'-bipyridine substance with national workplace exposure limit(s) (LV)	(CAS No) 366-18-7 (EC no) 206-674-4	< 0,1	Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Oral), H301

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

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

Symptoms/injuries after skin contact	: Repeated exposure may cause skin dryness or cracking.
Symptoms/injuries after ingestion	: Risk of lung oedema.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

dipropylene glycol monomethyl ether (34590-94-8)		
EU	Local name	(2-Methoxymethylethoxy)-propanol
EU	IOELV TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
EU	IOELV TWA (ppm)	50 ppm
EU	Notes	Skin
Austria	Local name	Dipropylenglykolmonomethylether (Isomerengemisch)
Austria	MAK (mg/m <sup>3</sup> )	307 mg/m <sup>3</sup>
Austria	MAK (ppm)	50 ppm
Austria	MAK Short time value (mg/m <sup>3</sup> )	614 mg/m <sup>3</sup>
Austria	MAK Short time value (ppm)	100 ppm
Austria	Remark (AT)	H
Belgium	Local name	Dipropylèneglycolmonométhyléther
Belgium	Limit value (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Belgium	Limit value (ppm)	50 ppm
Belgium	Remark (BE)	D

dipropylene glycol monomethyl ether (34590-94-8)		
Bulgaria	Local name	пропанол•
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Croatia	Local name	(2-Metoksimetiletoksi)– – propanol
Croatia	GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Croatia	GVI (granična vrijednost izloženosti) (ppm)	50 ppm
Croatia	Naznake (HR)	K, EU*
Czech Republic	Local name	propanol(2-Methoxymethylethoxy)-(technická sm s isomer )
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	270 mg/m <sup>3</sup>
Czech Republic	Expoziční limity (PEL) (ppm)	44,6 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m <sup>3</sup> )	550 mg/m <sup>3</sup>
Czech Republic	Expoziční limity (NPK-P) (ppm)	90,8 ppm
Czech Republic	Remark (CZ)	D
Denmark	Local name	Dipropylenglycolmethylether (1994)
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	300 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (ppm)	50 ppm
Denmark	Anmærkninger (DK)	EH
Estonia	Local name	Dipropüleenglükooli monometüleeter (2-etoksümetületoksi)-propanool
Estonia	OEL TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Estonia	OEL TWA (ppm)	50 ppm
Finland	Local name	(2-Metoksimetyylietoksi)- propanoli
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	310 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (ppm)	50 ppm
France	Local name	(2-méthoxyméthylethoxy)-propanol
France	VME (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
France	VME (ppm)	50 ppm
Germany	Local name	(2-Methoxymethylethoxy)propanol(Isomeregemisch)
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	310 mg/m <sup>3</sup>
Germany	TRGS 900 Occupational exposure limit value (ppm)	50 ppm
Germany	Remark (TRGS 900)	DFG,EU
Greece	OEL TWA (mg/m <sup>3</sup> )	600 mg/m <sup>3</sup>
Greece	OEL TWA (ppm)	100 ppm
Greece	OEL STEL (mg/m <sup>3</sup> )	900 mg/m <sup>3</sup>
Greece	OEL STEL (ppm)	150 ppm
Hungary	Local name	(2-METOXIMETILETOXI)-PROPANOL (Dipropilēnglikol-monometil-éter)
Hungary	AK-érték	308 mg/m <sup>3</sup>
Hungary	CK-érték	308 mg/m <sup>3</sup>
Hungary	Megjegyzések (HU)	EU1
Ireland	Local name	(2-Methoxymethylethoxy)-l-propanol
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	Notes (IE)	Sk, IOELV
Italy	Local name	(2-Metossimetilotossi)-propanolo
Italy	OEL TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Italy	OEL TWA (ppm)	50 ppm
Latvia	Local name	Metoksipropoksi propanols (dipropilēnglikola monometilēteris,DPM)
Latvia	OEL TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>

dipropylene glycol monomethyl ether (34590-94-8)		
Latvia	OEL TWA (ppm)	50 ppm
Lithuania	Local name	2-(2-metoksipropoksi)-propanolis (2-etoksimetiletoksi)-propanolis, dipropilenglikolio monometileteris
Lithuania	IPRV (mg/m <sup>3</sup> )	300 mg/m <sup>3</sup>
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m <sup>3</sup> )	450 mg/m <sup>3</sup>
Lithuania	TPRV (ppm)	75 ppm
Lithuania	Remark (LT)	O
Malta	Local name	(2-Methoxymethylethoxy)-propanol
Malta	OEL TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Malta	OEL TWA (ppm)	50 ppm
Netherlands	Local name	Dipropyleenglycolmethylether
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	300 mg/m <sup>3</sup>
Netherlands	Grenswaarde TGG 8H (ppm)	49 ppm (Dipropyleenglycolmethylether; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Poland	Local name	(2-Metoksymetyloetoksi)propanol
Poland	NDS (mg/m <sup>3</sup> )	240 mg/m <sup>3</sup>
Poland	NDSch (mg/m <sup>3</sup> )	480 mg/m <sup>3</sup>
Portugal	Local name	2-Metoximetiletoxipropanol (DPGME)
Portugal	OEL TWA (ppm)	100 ppm
Portugal	OEL STEL (ppm)	150 ppm
Romania	Local name	(2-metoximetiletoksi)-propanol
Romania	OEL TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Romania	OEL TWA (ppm)	50 ppm
Slovenia	Local name	(2-metoksimetiletoksi)propanol (mešanica izomer)
Slovenia	OEL TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Slovenia	OEL TWA (ppm)	50 ppm
Spain	Local name	Éter metílico de dipropilenglicol
Spain	VLA-ED (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Spain	VLA-ED (ppm)	50 ppm
Spain	Notes	Vía dérmica: (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 de este documento.), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.)
Sweden	Local name	Dipropylene glycol monomethyl ether
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	300 mg/m <sup>3</sup>
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m <sup>3</sup> )	450 mg/m <sup>3</sup>
Sweden	kortidsvärde (KTV) (ppm)	75 ppm
United Kingdom	Local name	(2-methoxymethylethoxy) propanol
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>

<b>dipropylene glycol monomethyl ether (34590-94-8)</b>		
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Norway	Local name	(2-Metoksymetyletoksy)-propanol
Norway	Grenseverdier (AN) (mg/m <sup>3</sup> )	300 mg/m <sup>3</sup>
Norway	Grenseverdier (AN) (ppm)	50 ppm
Norway	Merknader (NO)	H
Switzerland	Local name	Oxyde de dipropylèneglycolméthyle (mélange d'isomères)
Switzerland	VME (mg/m <sup>3</sup> )	300 mg/m <sup>3</sup>
Switzerland	VME (ppm)	50 ppm
Switzerland	VLE (mg/m <sup>3</sup> )	300 mg/m <sup>3</sup>
Switzerland	VLE (ppm)	50 ppm
Switzerland	Remark (CH)	15 min
Australia	Local name	(2-Methoxymethylethoxy) propanol
Australia	TWA (mg/m <sup>3</sup> )	308 mg/m <sup>3</sup>
Australia	TWA (ppm)	50 ppm
USA - ACGIH	ACGIH TWA (ppm)	100 ppm (2-Methoxymethylethoxy)propanol(DPGME); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value
USA - ACGIH	ACGIH STEL (ppm)	150 ppm (2-Methoxymethylethoxy)propanol(DPGME); USA; Short time value; TLV - Adopted Value
USA - OSHA	Local name	Dipropylene glycol methyl ether
USA - OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	600 mg/m <sup>3</sup>
USA - OSHA	OSHA PEL (TWA) (ppm)	100 ppm
<b>3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate (55406-53-6)</b>		
Switzerland	Local name	Butylcarbamate d'iodopropynyle*
Switzerland	VME (mg/m <sup>3</sup> )	0,12 mg/m <sup>3</sup>
Switzerland	VME (ppm)	0,01 ppm
Switzerland	VLE (mg/m <sup>3</sup> )	0,24 mg/m <sup>3</sup>
Switzerland	VLE (ppm)	0,02 ppm
Switzerland	Remark (CH)	4x15*
<b>cyclohexanone oxime (100-64-1)</b>		
Latvia	Local name	Cikloheksanonaoksīms
Latvia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Lithuania	Local name	Cikloheksanonoksimas
Lithuania	IPRV (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
<b>2,2'-bipyridine (366-18-7)</b>		
Latvia	Local name	2,2'-bipiridīns un 4,4'-bipiridīns
Latvia	OEL TWA (mg/m <sup>3</sup> )	0,2 mg/m <sup>3</sup>

### 8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment
Environmental exposure controls	: Avoid release to the environment.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid**

None under recommended storage and handling conditions (see section 7).

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity : Not classified

**dipropylene glycol monomethyl ether (34590-94-8)**

LD50 oral rat	5135 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg; Rat; Experimental value)
LD50 dermal rat	9500 mg/kg (Rat; Literature study; Equivalent or similar to OECD 402; >19020 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	9500 mg/kg (Rabbit; Literature study)

**permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (52645-53-1)**

LD50 oral rat	> 383 mg/kg (Rat)
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<b>permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (52645-53-1)</b>	
LD50 dermal rat	4000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
<b>3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate (55406-53-6)</b>	
LD50 oral rat	300-500, Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Experimental value
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LC50 inhalation rat (mg/l)	0,67 mg/l/4h (Rat; Experimental value)
<b>cyclohexanone oxime (100-64-1)</b>	
LD50 oral rat	883 - 1765 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
<b>2,2'-bipyridine (366-18-7)</b>	
LD50 oral rat	100 mg/kg (Rat)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

<b>dipropylene glycol monomethyl ether (34590-94-8)</b>	
EC50 Daphnia 1	1919 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	969 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum; Static system; Fresh water; Experimental value)
Threshold limit algae 2	> 969 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum; Static system; Fresh water; Experimental value)
<b>permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (52645-53-1)</b>	
LC50 fish 1	0,0025 mg/l (LC50; 96 h)
EC50 Daphnia 1	0,00043 mg/l (EC50; 48 h)
Threshold limit algae 1	.68 - .72, EC50
<b>3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate (55406-53-6)</b>	
LC50 fish 2	0,2 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system)
EC50 Daphnia 2	0,16 mg/l (EC50; EPA OPP 72-2; 48 h; Daphnia magna; Flow-through system)
Threshold limit algae 1	0,022 mg/l (EbC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Scenedesmus subspicatus; Static system)
<b>cyclohexanone oxime (100-64-1)</b>	
LC50 fish 1	250 mg/l (LC50; 48 h)
EC50 Daphnia 1	120 mg/l (EC50; 24 h)
Threshold limit algae 1	10 mg/l (EC50; 72 h)

#### 12.2. Persistence and degradability

<b>dipropylene glycol monomethyl ether (34590-94-8)</b>	
Persistence and degradability	Readily biodegradable in water. No (test) data available on mobility of the substance. Photolysis in the air.
Biochemical oxygen demand (BOD)	0 g O <sub>2</sub> /g substance
ThOD	2,06 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0



<b>3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate (55406-53-6)</b>	
Persistence and degradability	Not readily biodegradable in water. Inherently biodegradable. Low potential for adsorption in soil.
Chemical oxygen demand (COD)	1,15 g O <sub>2</sub> /g substance

<b>cyclohexanone oxime (100-64-1)</b>	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0,030 g O <sub>2</sub> /g substance

<b>2,2'-bipyridine (366-18-7)</b>	
Persistence and degradability	Biodegradability in water: no data available.

### 12.3. Bioaccumulative potential

<b>dipropylene glycol monomethyl ether (34590-94-8)</b>	
Log Pow	0,0043 (Experimental value; OECD 102: Melting Point/Melting Range; 25 °C)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

<b>permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (52645-53-1)</b>	
BCF fish 1	560 (BCF)
BCF fish 2	480 (BCF)
BCF other aquatic organisms 1	0,1 mg/l (BCF; >24 h)
BCF other aquatic organisms 2	1900 (BCF)
Log Pow	3,48 - 6,5
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

<b>3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate (55406-53-6)</b>	
BCF fish 1	3,3 - 4,5 (BCF)
Log Pow	2,81 (Literature; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).

<b>cyclohexanone oxime (100-64-1)</b>	
Log Pow	1,12
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

<b>2,2'-bipyridine (366-18-7)</b>	
Log Pow	1,50 (Experimental value)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

### 12.4. Mobility in soil

<b>permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (52645-53-1)</b>	
Ecology - soil	Toxic to bees.

<b>3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate (55406-53-6)</b>	
Surface tension	0,0691 N/m (158 mg/l)
Log Koc	Koc,PCKOCWIN v1.66; 198.1; Calculated value

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
3082	3082	3082	3082	3082
<b>14.2. UN proper shipping name</b>				
ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS	Environmentally hazardous substance,	ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS

ADR	IMDG	IATA	ADN	RID
SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate)	SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate)	liquid, n.o.s. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate)	SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate)	SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate)
<b>Transport document description</b>				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate), 9, III, (E)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate), 9, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate), 9, III, ENVIRONMENTALLY HAZARDOUS	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate), 9, III, ENVIRONMENTALLY HAZARDOUS	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole ; 3-iodo-2-propynyl butylcarbamate; 3-iodoprop-2-yn-1-yl butylcarbamate ; permethrin, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarb oxylate), 9, III, ENVIRONMENTALLY HAZARDOUS
<b>14.3. Transport hazard class(es)</b>				
9	9	9	9	9
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 601, 375
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29

Tank code (ADR) : LGBV  
Vehicle for tank carriage : AT  
Transport category (ADR) : 3  
Special provisions for carriage - Packages (ADR) : V12  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13  
Hazard identification number (Kemler No.) : 90  
Orange plates :



Tunnel restriction code (ADR) : E  
EAC code : •3Z

### - Transport by sea

Special provisions (IMDG) : 274, 335, 969  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
Special packing provisions (IMDG) : PP1  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP2, TP29  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-F  
Stowage category (IMDG) : A

### - Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y964  
PCA limited quantity max net quantity (IATA) : 30kgG  
PCA packing instructions (IATA) : 964  
PCA max net quantity (IATA) : 450L  
CAO packing instructions (IATA) : 964  
CAO max net quantity (IATA) : 450L  
Special provisions (IATA) : A97, A158, A197  
ERG code (IATA) : 9L

### - Inland waterway transport

Classification code (ADN) : M6  
Special provisions (ADN) : 274, 335, 375, 601  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP  
Number of blue cones/lights (ADN) : 0

### - Rail transport

Classification code (RID) : M6  
Special provisions (RID) : 274, 335, 375, 601  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Special packing provisions (RID) : PP1  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T4

Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Nourish and Protect Clear Universal - propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole - hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Nourish and Protect Clear Universal - propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole - hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics - hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
3.c. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Nourish and Protect Clear Universal - propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole - Nourish and Protect Clear Universal - propiconazole, (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

**15.1.2. National regulations****Germany**

VwVwS Annex reference	: Water hazard class (WGK) 2, hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Netherlands**

SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed

**Denmark**

Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product
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**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

**SECTION 16: Other information**

Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H332	Harmful if inhaled
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
EUH066	Repeated exposure may cause skin dryness or cracking

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*