

SAFETY DATA SHEET

Fungistop

### SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier	
Product name	: Fungistop
Code	: 117082
Product description	: Not available.
Product type	: Liquid.
Other means of identification	: Not available.

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

Wood preservative with combined effect against fungi and insects

#### 1.3 Details of the supplier of the safety data sheet

e-mail address of person : berling@berling.gr responsible for this SDS

#### Supplier

BERLING ABEE Thesi Ag.Paraskevi 32011 Inofita, Viotia-Greece Tel: +302262031663 fax: +302262031293 info@berling.gr www.berling.gr

Hours of operation

: Monday - Friday: 08.00 - 16.00 (CET)

#### 1.4 Emergency telephone number

Emergency telephone : +30 210 7793 777(GreeK Poison Center) number

National advisory body/Poison Center

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

:

:

Flam. Liq. 3, H226 Eye Irrit. 2, H319 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

# Ingredients of unknown toxicity

#### Ingredients of unknown ecotoxicity

See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Flammable liquid and vapor.</li> <li>Causes serious eye irritation.</li> <li>May be fatal if swallowed and enters airways.</li> <li>Very toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	
General	: Collect spillage. If medical advice is needed, have product container or label at hand. Keep out of reach of children.
Prevention	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Wear eye protection.
Response	: Wash hands thoroughly after handling. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. In case of fire: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam to extinguish.
Storage	: Store in a well-ventilated place. Store locked up. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics
Supplemental label elements	: Contains 3-iodo-2-propynyl butylcarbamate, poly (ethyleneglycol) dimethacrylate, m- phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and propiconazole (ISO). May produce an allergic reaction. Repeated exposure may cause skin dryness or cracking.
Special packaging requirem	nents
Containers to be fitted with child-resistant fastenings	: Yes, applicable.
Tactile warning of danger	: Yes, applicable.
2.3 Other hazards	
Other hazards which do not result in classification	: None known.

## **SECTION 3: Composition/information on ingredients**

: Mixture

Substance/mixture

			<b>Classification</b>	
Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	REACH #: 01-2119457273-39	≥75 - ≤90	Asp. Tox. 1, H304	[1] [2]
	EC: 918-481-9 (ex 265-150-3) CAS: 64742-48-9 Index: 649-327-00-6		EUH066	
2-butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0	≤10	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1] [2]
Oxirane, 2-methyl-, polymer with oxirane, mono(2-ethylhexyl) ether	REACH #: Polymer	≤3	Acute Tox. 4, H332	[1]
	CAS: 64366-70-7		Aquatic Chronic 3, H412	
3-iodo-2-propynyl	REACH #: Biocide	0.75	Acute Tox. 4, H302	[1]
Dutyicarbamate	EC: 259-627-5 CAS: 55406-53-6 Index: 616-212-00-7		Acute Tox. 3, H331 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372 (larynx) (inhalation) Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	
Paraffin Oil	REACH #: 01-2119487078-27 EC: 232-455-8 CAS: 8042-47-5	1	Asp. Tox. 1, H304	[1] [2]
poly (ethyleneglycol) dimethacrylate	REACH #: Polymer	<1	Skin Sens. 1, H317	[1]
	CAS: 26142-30-3			
m-phenoxybenzyl 3- (2,2-dichlorovinyl) -2,2-dimethylcyclopropanecarboxylate	REACH #: Biocide	0.25	Acute Tox. 4, H302	[1] [2]
	EC: 258-067-9 CAS: 52645-53-1 Index: 613-058-00-2		Acute Tox. 4, H332 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=1000)	
propiconazole (ISO)	REACH #: Biocide EC: 262-104-4 CAS: 60207-90-1 Index: 613-205-00-0	0.24	Acute Tox. 4, H302 Skin Sens. 1, H317 Repr. 1B, H360D (Unborn child) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) See Section 16 for the full text of the H statements declared above.	[1]

<u>Type</u>

### **SECTION 3: Composition/information on ingredients**

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Other hazards which do not result in classification

### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

Potential acute healtl	n effects
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: May be fatal if swallowed and enters airways.
Over-exposure signs	/symptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation dryness cracking
Ingestion	: Adverse symptoms may include the following: nausea or vomiting
4.3 Indication of any in	nmediate medical attention and special treatment needed
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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### **SECTION 4: First aid measures**

**Specific treatments** : No specific treatment.

## **SECTION 5: Firefighting measures**

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising	from the substance or mixture
Hazards from the substance or mixture	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
5.3 Advice for firefighters	
Special precautions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## **SECTION 6: Accidental release measures**

6.1 Personal precautions, pro	tective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
6.3 Methods and materials for	r containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 6: Accide	ental release measures
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
6.4 Reference toother sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

### **SECTION 7: Handling and storage**

CECTION C. Assistantal valases

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s). (Applicable when exposure scenario is available.)

#### 7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Keep away from food, drink and animal feedingstuffs.
7.2 Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. May not be disposed of in sewers, including rainwater canals.
7.3 Specific end use(s)	
Recommendations	: Not available.
Industrial sector specific solutions	: Not available.

### **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s). (Applicable when exposure scenario is available.)

#### 8.1 Control parameters

#### **Occupational exposure limits**

CTION 8: Exposure controls/personal protection
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B	
Product/ingredient name	Exposure limit values
Europe	
2-butoxyethanol	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 20 ppm 8 hours. TWA: 98 mg/m <sup>3</sup> 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m <sup>3</sup> 15 minutes.
Austria	
2-butoxyethanol	Regulation on Limit Values - MAC (Austria, 12/2011). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m <sup>3</sup> 8 hours. PEAK: 40 ppm, 4 times per shift, 30 minutes. PEAK: 200 mg/m <sup>3</sup> , 4 times per shift, 30 minutes.
Belgium	
2-butoxyethanol	Limit values (Belgium, 4/2014). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m <sup>3</sup> 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m <sup>3</sup> 15 minutes.
Paraffin Oil	Limit values (Belgium, 4/2014). TWA: 5 mg/m³ 8 hours. Form: mist STEL: 10 mg/m³ 15 minutes. Form: mist
Bulgaria	
2-butoxyetnanoi	Hinister of Labour and Social Affairs and the Minister of Health (Bulgaria, 1/2012). Absorbed through skin. Limit value 8 hours: 98 mg/m <sup>3</sup> 8 hours. Limit value 15 min: 246 mg/m <sup>3</sup> 15 minutes. Limit value 15 min: 50 ppm 15 minutes. Limit value 8 hours: 20 ppm 8 hours.
Paraffin Oil	Minister of Labour and Social Affairs and the Minister of Health (Bulgaria, 1/2012). Limit value 8 hours: 5 mg/m <sup>3</sup> 8 hours.
m-phenoxybenzyl 3-(2,2-dichlorovinyl) -2,2-dimethylcyclopropanecarboxylate	Minister of Labour and Social Affairs and the Minister of Health (Bulgaria, 8/2007). Limit value 8 hours: 5 mg/m <sup>3</sup> 8 hours.
Croatia	
2-butoxyethanol	Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 6/2013). Absorbed through skin. STELV: 246 mg/m <sup>3</sup> 15 minutes. STELV: 50 ppm 15 minutes. ELV: 98 mg/m <sup>3</sup> 8 hours. ELV: 20 ppm 8 hours.
Czech Republic	
2-butoxyethanol	Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 1/2013). Absorbed through skin. TWA: 100 mg/m <sup>3</sup> 8 hours. TWA: 20.7 ppm 8 hours. STEL: 200 mg/m <sup>3</sup> 15 minutes. STEL: 41.4 ppm 15 minutes.
Paraffin Oil	Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 1/2013). TWA: 5 mg/m <sup>3</sup> 8 hours. Form: aerosol STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: aerosol
Denmark	-
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2-butoxyethanol	Working Environment Authority (Denmark, 10/2012). Absorbed
	TWA: 20 ppm 8 hours.
	TWA: 98 mg/m <sup>3</sup> 8 hours.
Paraffin Oil	Working Environment Authority (Denmark, 10/2012). TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and particles
Estonia	
2-butoxyethanol	Occupational exposure limits, Regulation No. 293 (Estonia, 1/2008). Absorbed through skin. Skin sensitizer. TWA: 98 mg/m <sup>3</sup> 8 hours. TWA: 20 ppm 8 hours.
	STEL: 50 ppm 15 minutes.
Finland	
2-butoxyethanol	Institute of Occupational Health, Ministry of Social Affairs (Finland, 3/2014). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m <sup>3</sup> 8 hours. STEL: 50 ppm 15 minutes.
France	STEL. 250 mg/m T5 minutes.
2-butoxyethanol	Ministry of Labor (France, 7/2012). Absorbed through skin. Notes: Labour Act , Art 4412-149 (Regulatory binding
	exposure limits)
	TWA: 10 ppm 8 nours. TWA: 49 ma/m <sup>3</sup> 8 hours.
	STEL: 246 mg/m <sup>3</sup> 15 minutes.
_	STEL: 50 ppm 15 minutes.
Germany	
isoalkanes, cyclics, <2% aromatics	TWA: 50 ppm 8 hours. TWA: 300 mg/m <sup>3</sup> 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes.
2-butoxyethanol	TRGS 900 OEL (Germany, 3/2015). Absorbed through skin. TWA: 49 mg/m <sup>3</sup> 8 hours.
	PEAK: 196 mg/m <sup>3</sup> 15 minutes. TWA: 10 ppm 8 hours. PEAK: 40 ppm 15 minutes
	DFG MAC-values list (Germany, 7/2015). Absorbed through
	sκin. TWA: 10 ppm 8 hours.
	PEAK: 20 ppm, 4 times per shift, 15 minutes. TWA: 49 mg/m <sup>3</sup> 8 hours.
	PEAK: 98 mg/m <sup>3</sup> , 4 times per shift, 15 minutes.
Paraffin Oil	DFG MAC-values list (Germany, 7/2015). PEAK: 20 mg/m <sup>3</sup> , 4 times per shift, 15 minutes. Form: respirable
	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: respirable fraction
3-iodo-2-propynyl butylcarbamate	<b>DFG MAC-values list (Germany, 7/2018). Skin sensitizer.</b> PEAK: 0.116 mg/m <sup>3</sup> , 4 times per shift, 15 minutes.
	PEAK: 0.01 ppm, 4 times per shift, 15 minutes. TWA: 0.058 mg/m <sup>3</sup> 8 hours.
	TRGS 900 OEL (Germany, 6/2018). Skin sensitizer.
	PEAK: 0.116 mg/m <sup>3</sup> 15 minutes. PEAK: 0.01 ppm 15 minutes.
	TWA: 0.058 mg/m <sup>3</sup> 8 hours.
Greece	
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2-butoxyethanol	Ministry of Labour and Social Affairs (Greece, 2/2012).		
-	Absorbed through skin.		
	TWA: 25 ppm 8 hours.		
Paraffin Oil	Ministry of Labour and Social Affairs (Greece, 2/2012).		
	TWA: 5 mg/m <sup>3</sup> 8 hours.		
Hungary			
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	25/2000. (IX.30) Ministry of Health and Ministry of Social and Family Affairs Joint Decree (Hungary).		
2-butoxyethanol	25/2000. (IX.30) Ministry of Health and Ministry of Social and Family Affairs Joint Decree (Hungary, 12/2011). Absorbed through skin. TWA: 98 mg/m <sup>3</sup> 8 hours.		
Paraffin Oil	PEAK: 246 mg/m <sup>3</sup> 15 minutes. 25/2000. (IX.30) Ministry of Health and Ministry of Social and Family Affairs Joint Decree (Hungary, 12/2011). CEIL: 5 mg/m <sup>3</sup> Form: mist		
Ireland			
2-butoxyethanol	NAOSH (Ireland, 12/2011). Absorbed through skin.		
	OELV-8hr: 20 ppm 8 hours.		
	OELV-8nr: 98 mg/m <sup>2</sup> 8 nours. OELV-15min: 50 ppm 15 minutes.		
	OELV-15min: 246 mg/m <sup>3</sup> 15 minutes.		
Paraffin Oil	NAOSH (Ireland, 12/2011).		
Italy			
2-butoxyethanol	Ministry of Labour and Social Policy (Italy, 10/2013). Absorbed		
,	through skin.		
	8 hours: 20 ppm 8 hours.		
	8 nours: 98 mg/m <sup>2</sup> 8 nours. Short Term: 50 nom 15 minutes		
	Short Term: 246 mg/m <sup>3</sup> 15 minutes.		
_atvia			
2-butoxyethanol	Ministers Cabinet Regulations Nr.325 - AER (Latvia, 6/2015).		
	Absorbed through skin. $TW/A \cdot 98 mg/m^3 8 hours$		
	TWA: 20 ppm 8 hours.		
	STEL: 50 ppm 15 minutes.		
	STEL: 246 mg/m³ 15 minutes.		
	Lithuanian Hygiono Standard HN 23 (Lithuania, 10/2007)		
2-Duloxyelliario	Absorbed through skin.		
	TWA: 50 mg/m <sup>3</sup> 8 hours.		
	TWA: 10 ppm 8 hours.		
	STEL: 100 mg/m <sup>3</sup> 15 minutes. STEL: 20 ppm 15 minutes.		
Netherlands			
2-butoxyethanol	Ministry of Social Affairs and Employment, Legal limit values		
	(Netherlands, 12/2014). Absorbed through skin. OEL, 8-h TWA: 100 mg/m <sup>3</sup> 8 hours.		
Paraffin Oil	STEL,15-min: 246 mg/m <sup>3</sup> 15 minutes.		
	(Netherlands, 12/2014).		
	OEL, 8-h TWA: 5 mg/m³ 8 hours. Form: mist		
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2-butoxyethanol	FOR-2011-12-06-1358 (Norway, 6/2015). Absorbed through
	Skin. TWA: 10 ppm 8 bours
	TWA: 10 ppm 8 hours. TWA: 50 mg/m <sup>3</sup> 8 hours.
Paraffin Oil	FOR-2011-12-06-1358 (Norway, 6/2015).
	TWA: 1 mg/m <sup>3</sup> 8 hours. Form: mist and particles
Delend	I WA: 50 mg/m <sup>o</sup> 8 nours. Form: vapor
isoalkanes, cyclics, <2% aromatics	of 12 June 2018, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (J of Laws 2018, item 1286) (Poland,
	12/2011). STEL: 900 mg/m <sup>3</sup> 15 minutes. TW/A: 300 mg/m <sup>3</sup> 8 hours
2-butoxyethanol	Regulation of the Minister of Family, Labor and Social Policy
	of 12 June 2018, regarding the highest permissible concentrations and values of agents harmful to health in the
	work environment (J of Laws 2018, item 1286) (Poland, 6/2014).
	I WA: 98 mg/m³ 8 hours.
Paraffin Oil	Regulation of the Minister of Family, Labor and Social Policy
	of 12 June 2018, regarding the highest permissible
	concentrations and values of agents harmful to health in the work environment (J of Laws 2018, item 1286) (Poland, 6/2014).
	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Portugal	
2-butoxyethanol	Portuguese Institute of Quality (Portugal, 11/2014).
	TWA: 20 ppm 8 hours.
Paratfin Oil	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Only aerosol STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Only aerosol
Romania	
2-butoxyethanol	HG 1218/2006 with subsequent modifications and additions (Romania, 1/2012). Absorbed through skin. Short term: 50 ppm 15 minutes.
	VLA: 98 mg/m <sup>2</sup> 8 hours. VLA: 20 ppm 8 hours.
	Short term: 246 mg/m <sup>3</sup> 15 minutes.
Paraffin Oil	HG 1218/2006 with subsequent modifications and additions (Romania, 1/2012).
	VLA: 5 mg/m³ 8 hours. Short term: 10 mg/m³ 15 minutes
Slovakia	Chort term. To mg/m. To minutes.
2-butoxyethanol	Government regulation SR c. 356/2006 (Slovakia, 12/2011).
	Absorbed through skin. TWA: 98 mg/m <sup>3</sup> 8 hours.
	TWA: 20 ppm 8 hours. STEL: 246 mg/m <sup>3</sup> 15 minutes.
Paraffin Oil	STEL: 50 ppm 15 minutes. Government regulation SP c 356/2006 (Slovakia 12/2011)
	TWA: 1 mg/m <sup>3</sup> , (Mineral oils) 8 hours. Form: liquid aerosol, fumes TWA: 5 ppm, (Mineral oils) 8 hours. Form: liquid aerosol, fumes STEL: 3 mg/m <sup>3</sup> , (Mineral oils) 15 minutes. Form: liquid aerosol, fumes
	STEL: 15 ppm, (Mineral oils) 15 minutes. Form: liquid aerosol,
Slovenia	
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SECTION 8: Exposure controls/personal protection				
2-butoxyethanol	Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 6/2015). Absorbed through skin. TWA: 98 mg/m <sup>3</sup> 8 hours. TWA: 20 ppm 8 hours. KTV: 245 mg/m <sup>3</sup> , 4 times per shift, 15 minutes. KTV: 50 ppm, 4 times per shift, 15 minutes.			
Spain				
2-butoxyethanol	National institute of occupational safety and health (Spain, 1/2015). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m <sup>3</sup> 8 hours. STEL: 245 mg/m <sup>3</sup> 15 minutes. STEL: 50 ppm 15 minutes.			
Paraffin Oil	National institute of occupational safety and health (Spain, 1/2015). TWA: 5 mg/m <sup>3</sup> 8 hours. Form: mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: mist			
Sweden				
2-butoxyethanol	Work environment authority Regulation 2018:1 (Sweden, 12/2011). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 50 mg/m <sup>3</sup> 8 hours. STEL: 20 ppm 15 minutes. STEL: 100 mg/m <sup>3</sup> 15 minutes.			
Paraffin Oil	<ul> <li>Work environment authority Regulation 2018:1 (Sweden, 12/2011).</li> <li>TWA: 1 mg/m<sup>3</sup> 8 hours. Form: mist and fume STEL: 3 mg/m<sup>3</sup> 15 minutes. Form: mist and fume</li> </ul>			
Switzerland				
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	SUVA (Switzerland, 6/2013). STEL: 600 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. TWA: 300 mg/m <sup>3</sup> 8 hours.			
2-butoxyethanol	SUVA (Switzerland, 1/2015). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 49 mg/m <sup>3</sup> 8 hours. STEL: 20 ppm 15 minutes. STEL: 98 mg/m <sup>3</sup> 15 minutes.			
3-iodo-2-propynyl butylcarbamate	SUVA (Switzerland, 1/2018). Skin sensitizer. STEL: 0.24 mg/m <sup>3</sup> 15 minutes. Form: vapour and aerosols STEL: 0.02 ppm 15 minutes. Form: vapour and aerosols TWA: 0.01 ppm 8 hours. Form: vapour and aerosols TWA: 0.12 mg/m <sup>3</sup> 8 hours. Form: vapour and aerosols			
Turkey				
2-butoxyethanol	TR ISGGM OEL (Turkey, 12/2013). Absorbed through skin. TWA: 98 mg/m <sup>3</sup> 8 hours. TWA: 20 ppm 8 hours. STEL: 246 mg/m <sup>3</sup> 15 minutes. STEL: 50 ppm 15 minutes.			
Paraffin Oil	ACGIH TLV (United States, 3/2015). TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction			
United Kingdom (UK)				
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics 2-butoxyethanol	EH40/2005 WELs (United Kingdom (UK)). TWA: 1200 mg/m <sup>3</sup> Form: Vapor EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 50 ppm 15 minutes. TWA: 25 ppm 8 hours.			

## **SECTION 8: Exposure controls/personal protection**

Recommended monitoring	: If this product contains ingredients with exposure limits, personal, workplace			
procedures	atmosphere or biological monitoring may be required to determine the effectiveness			
	of the ventilation or other control measures and/or the necessity to use respiratory			
	protective equipment. Reference should be made to monitoring standards, such as			
	the following: European Standard EN 689 (Workplace atmospheres - Guidance for			
	the assessment of exposure by inhalation to chemical agents for comparison with			
	limit values and measurement strategy) European Standard EN 14042 (Workplace			
	atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482			
	(Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance			
	documents for methods for the determination of hazardous substances will also be required.			

#### **Derived effect levels**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
2-butoxyethanol	DNEL	Long term Oral	3.2 mg/kg bw/day	General population	Systemic
	DNEL	Short termOral	26.7 mg/ kg bw/day	General population	Systemic
	DNEL	Short termDermal	89 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	125 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	75 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	38 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	123 mg/m <sup>3</sup>	General population [Consumers]	Local
	DNEL	Short term Inhalation	1091 mg/ m³	Workers	Systemic
	DNEL	Short term Inhalation	246 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	59 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic

#### Predicted effect concentrations

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
2-butoxyethanol	-	Fresh water	8.8 mg/l	-
	-	Marine water	0.88 mg/l	-
	-	Fresh water sediment	34.6 mg/l	-
	-	Marine water sediment	3.46 mg/l	-
	-	Sewage Treatment	463 mg/l	-
		Plant		
	-	Soil	2.33 mg/kg	-

#### 8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Individual protection measures

## **SECTION 8: Exposure controls/personal protection**

-	
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Wear suitable gloves tested to EN374. Cat. 3
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## **SECTION 9: Physical and chemical properties**

9.1 Information on basic physi	cal and chemical
properties Appearance	
Physical state	: Liquid.
Color	: Clear. Colorless.
Odor	: Characteristic.
Odor threshold	: Not available.
рН	: 7 [Conc. (% w/w): 1%]
Melting point/freezing point	: Not available.
Initial boiling point and boiling	: Not available.
range	
Flash point	: Closed cup: 57.5°C [Pensky-Martens.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Notavailable.
Burning time	: Not applicable.
Burning rate	: Not applicable.
Upper/lower flammability or explosive limits	: Not available.
Vapor pressure	: Not available.

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## **SECTION 9: Physical and chemical properties**

Vapor density	: Not available.
Relative density	: 0.8
Solubility(ies)	: Not available.
<b>Dispersibility properties</b>	: Notavailable.
Partition coefficient: n-octanol/	: Not available.
water	
Auto-ignition temperature	: 148°C
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): 1.5 mPa·s Kinematic (room temperature): 0.019 cm²/s Kinematic (40°C): 0.014 cm²/s
Explosiveproperties	: Not available.
Oxidizing properties	: Not an oxidizer

#### 9.2 Other information

No additional information.

SECTION 10: Stability and reactivity				
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.			
10.2 Chemical stability	: The product is stable.			
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.			
10.4 Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.			
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials			
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

Product/ingredient name	Result	Species	Dose	Exposure
Hydrocarbons, C10-C13, n-	LC50 Inhalation Vapor	Rat	>6.1 mg/l	4 hours
alkanes, isoalkanes, cyclics, <2% aromatics				
	LD50 Dermal	Rabbit	>3000 mg/kg	-
	LD50 Oral	Rat	>15000 mg/kg	-
2-butoxyethanol	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Rabbit	300 mg/kg	-
	LD50 Oral	Rat	917 mg/kg	-
Oxirane, 2-methyl-, polymer	LC50 Inhalation Dusts and	Rat	2.76 mg/l	4 hours
with oxirane, mono (2-ethylhexyl) ether	mists			
	LD50 Dermal	Rat	>4000 mg/kg	-
	LD50 Oral	Rat	2645 mg/kg	-
3-iodo-2-propynyl	LC50 Inhalation Dusts and	Rat	0.763 g/m³	4 hours Aerosol.
butylcarbamate	mists			
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat - Female	1056 mg/kg	-

## **SECTION 11: Toxicological information**

	logical information			
	LD50 Oral	Rat - Male	1795 mg/kg	-
permethrin (ISO)	LC50 Inhalation Dusts and	Rat	>23.5 mg/l	4 hours
	mists			
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Dermal	Rat	>1750 mg/kg	-
	LD50 Oral	Rat	383 mg/kg	-
	LD50 Oral	Rat	480 mg/kg	-
	LD50 Oral	Rat	480 mg/kg	-
propiconazole (ISO)	LC50 Inhalation Dusts and	Rat	1264 mg/m <sup>3</sup>	4 hours
	mists			
	LD50 Dermal	Rat	>4 g/kg	-
	LD50 Oral	Rat	1517 mg/kg	-

**Conclusion/Summary** : Not available.

#### Acute toxicity estimates

Route	ATE value
Oral	21666.67 mg/kg
Dermal	18333.33 mg/kg
Inhalation (dusts and mists)	18.24 mg/l

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
3- iodo-2-propynyl butylcarbamate	Eyes - Severe irritant	Rabbit	-	-	-
poly (ethyleneglycol) dimethacrylate	Skin - Irritant	Rabbit	-	-	-

#### **Conclusion/Summary**

: Not available.

#### <u>Sensitizer</u>

Product/ingredient name	Route of exposure	Species	Result
2-butoxyethanol	skin	Guinea pig	Not sensitizing
poly (ethyleneglycol) dimethacrylate	skin	Guinea pig	Not sensitizing
m-phenoxybenzyl 3- (2,2-dichlorovinyl) -2,2-dimethylcyclopropanecarboxylate	skin	Guinea pig	Sensitizing
propiconazole (ISO)	skin	Guinea pig	Sensitizing

#### **Conclusion/Summary**

: Not available.

#### **Mutagenicity**

Product/ingredient name	Test	Experiment	Result
3-iodo-2-propynyl butylcarbamate	-	Experiment: In vitro Subject: Bacteria	Negative

Conclusion/Summary

#### : Not available.

**Carcinogenicity** 

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

### **SECTION 11: Toxicological information**

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
3-iodo-2-propynyl butylcarbamate	Positive	-	Negative	Rabbit - Female	Oral: 50 mg/kg	13 days; 7 days per week
	Negative	-	Negative	Rabbit - Female	Oral: 20 mg/kg	13 days; 7 days per week

**Conclusion/Summary** : Not available.

#### **Teratogenicity**

Product/ingredient name	Result	Species	Dose	Exposure
3-iodo-2-propynyl butylcarbamate	Negative - Oral	Rabbit - Female	50 mg/kg	-

Conclusion/Summary : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
3-iodo-2-propynyl butylcarbamate	Category 1	Inhalation	larynx

#### Aspiration hazard

Product/ingredient name		Result		
Hydrocarbons, C10-C13, n aromatics	-alkanes, isoalkanes, cyclics, <2%	ASPIRATION HAZARD - Category 1		
Information on the likely routes of exposure	: Not available.			
Potential acute health effe	<u>ects</u>			
Inhalation	: No known significant effects or	critical hazards.		
Ingestion	: May be fatal if swallowed and e	nters airways.		
Skin contact	: Defatting to the skin. May cause	e skin dryness and irritation.		
Eye contact	: Causes serious eye irritation.			
Symptoms related to the	physical, chemical and toxicologic	cal characteristics		
Inhalation	: No specific data.			
Ingestion	: Adverse symptoms may include nausea or vomiting	the following:		
Skin contact	: Adverse symptoms may include irritation dryness cracking	the following:		
Eye contact	: Adverse symptoms may include pain or irritation watering redness	the following:		
Delayed and immediate ef	fects and also chronic effects from	short and long term exposure		
Short term exposure				
Potential immediate effects	: Not available.			
Potential delayed effect	ts: Not available.			
Long term exposure				
Potential immediate effects	: Not available.			

## **SECTION 11: Toxicological information**

#### Potential delayed effects : Not available.

#### Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
3-iodo-2-propynyl butylcarbamate	Sub-chronic NOAEL Oral	Rat	35 mg/kg	90 days
	Chronic NOAEL Oral	Rat	20 mg/kg	2 years
	Sub-chronic NOAEL Dermal	Rat	200 mg/kg	90 days
	Sub-acute NOAEL Oral	Rabbit - Male, Female	13 mg/kg	-
	Sub-chronic NOAEL Inhalation Vapor	Rat	1.16 mg/m³	90 days
m-phenoxybenzyl 3- (2,2-dichlorovinyl) -2,2-dimethylcyclopropanecarboxylate	Sub-chronic NOAEL Oral	Dog	5 mg/kg	1 years
propiconazole (ISO)	Sub-chronic NOAEL Oral	Mouse	2.7 mg/kg	17 weeks
	Sub-chronic NOAEL Dermal	Rat	100 mg/kg	28 days
Conclusion/Summary	: Notavailable.			
General	: Prolonged or repeated conta or dermatitis.	act can defat the sk	in and lead to irrita	tion, cracking and/
Carcinogenicity	: No known significant effects	or critical hazards.		
Mutagenicity	: No known significant effects	or critical hazards.		
Teratogenicity	: No known significant effects	or critical hazards.		
Developmental effects	: No known significant effects	or critical hazards.		
Fertility effects	: No known significant effects	or critical hazards.		

## **SECTION 12: Ecological information**

: Not available.

### 12.1 Toxicity

Other information

Product/ingredient name	Result	Species	Exposure
Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, <2% aromatics	Acute LC50 >100 mg/l	Algae	96 hours
	Acute LC50 >100 mg/l	Daphnia	96 hours
	Acute LC50 >100 mg/l	Fish	96 hours
2-butoxyethanol	Acute EC50 >1000 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 800000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1250000 µg/l Marine water	Fish - Menidia beryllina	96 hours
Oxirane, 2-methyl-, polymer	Acute LC50 20 mg/l	Fish - Brachydanio rerio	96 hours
with oxirane, mono (2-ethylhexyl) ether			
3-iodo-2-propynyl butylcarbamate	EC50 0.05 mg/l	Daphnia - Daphnia magna	21 days
	EC50 44 mg/l	Micro-organism	3 hours
	NOEC 0.0084 mg/l	Fish - Pimephales promelas -	35 days
	NOEC 0 049 mg/l	Fish - rainbow trout	96 hours
	Acute EC50 0.022 mg/l	Algae - Scenedesmus	72 hours
	/ louio 2000 0.022 mg/l	subspicatus	12 nouro
	Acute EC50 0.16 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.067 mg/l	Fish - rainbow trout	96 hours
	Acute NOEC 0.0046 mg/l	Algae - Scenedesmus	72 hours
		subspicatus	
permethrin (ISO)	Acute EC50 0.5 mg/l	Algae	72 hours
	Acute EC50 0.00064 mg/l	Daphnia - Daphnia magna	48 hours
	Acute EC50 0.00017 mg/l	Daphnia	48 hours
	Acute EC50 0.112 ppb Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 >1.13 mg/l	Algae - Pseudokirchneriella	72 hours
	-	subcapitata	
	Acute LC50 0.548 ppb Marine water	Crustaceans - Palaemonetes	48 hours
1	I	1	1

propiconazole (ISO)	Acute LC50 0.0051 mg/l Acute LC50 0.0076 mg/l Acute LC50 0.62 µg/l Fresh water Acute EC50 0.76 mg/l	pugio Fish Fish Fish - Oncorhynchus mykiss Algae - Scenedesmus	96 hours 96 hours 96 hours 72 hours
	Acute EC50 10.2 mg/l Acute LC50 4.3 mg/l	subspicatus Daphnia - Daphnia magna Fish	48 hours 96 hours

**Conclusion/Summary** : Not available.

#### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, <2% aromatics	-	80 % - Readily - 28 days	-	-
2-butoxyethanol	301B Ready Biodegradability- CO <sub>2</sub> Evolution Test	90 % - Readily - 28 days	-	-
	-	18.3 % - Readily - 3 days	-	-
3-iodo-2-propynyl butylcarbamate	OECD 301F	25 % - 28 days	1.03 gO₂/g ThOD	30 mg/l Activated sludge
poly (ethyleneglycol) dimethacrylate	-	14 to 21 % - 28 days	-	-
Conclusion/Summary	: Notavailable.			

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hydrocarbons, C10-C13, n-	-	-	Not readily
alkanes, isoalkanes, cyclics,			
<2% aromatics			
3-iodo-2-propynyl	-	-	Readily
butylcarbamate			
permethrin (ISO)	-	-	Not readily
propiconazole (ISO)	-	-	Not readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, <2% aromatics	5.5 to 7.2	-	high
3-iodo-2-propynyl butylcarbamate	2.81	-	low
permethrin (ISO) propiconazole (ISO)	6.1 3.65	570 116	high Iow

#### 12.4 Mobility in soil

Soil/water partition coefficient (K <sub>oc</sub> )	: Not available.
Mobility	: Not available.

#### 12.5 Results of PBT and vPvB assessment

PBT	: Not applicable.
vPvB	: Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

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### **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

#### Product

Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: Yes.

## European waste catalogue (EWC)

Waste code	Waste designation
03 02 05*	other wood preservatives containing hazardous substances
15 01 10*	packaging containing residues of or contaminated by hazardous substances
Packaging	·
Methods of disposal	<ul> <li>The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.</li> </ul>
Special precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

	ADR/RID	IMDG	ΙΑΤΑ
14.1 UN number	UN1993	UN1993	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, <2% aromatics, permethrin (ISO))	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, <2% aromatics, permethrin (ISO))	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, <2% aromatics, permethrin (ISO))
14.3 Transport hazard class(es)	3 F1		3
14.4 Packing group	111	Ш	111
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
14.6 Special precautions for user	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or
Date of issue/Date	of revision : July 07.2020	Version :	3 <b>19/2</b> 2

### **SECTION 14: Transport information**

	spillage.	spillage.	spillage.
Additional information	The environmentally hazardous substance mark is not required when transported in sizes of $\leq 5$ L or $\leq 5$ kg. <u>Tunnel code</u> (D/E)	The marine pollutant mark is not required when transported in sizes of $\leq$ 5 L or $\leq$ 5 kg. <u>Emergency schedules</u> F-E, S-E	The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.7 Transport in bulk: Not available.according to IMOinstruments

## **SECTION 15: Regulatory information**

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

EU Regulation (EC) No. 1907/2006 (REACH)

#### Annex XIV - List of substances subject to authorization

#### Substances of very high concern

None of the components are listed.

•	
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Other EU regulations	
Black List Chemicals	: Notlisted
Priority List Chemicals	: Not determined
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
propiconazole (ISO)	-	-	Repr. 1B, H360D (Unborn child)	-
te of issue/Date of revisio	<b>1</b> : July 07,2020		Version :3	20/2

## **SECTION 15: Regulatory information**

Registry No : EL TΠ8-0122		
	Hazard class for water	: 2 AwSV Anlage 1, Nummer 5.3
	Chemical Weapons Convention List ScheduleI Chemicals	: Not listed
	Chemical Weapons Convention List Schedule II Chemicals	: Not listed
	Chemical Weapons Convention List Schedule III Chemicals	: Not listed
15.2 Chemical Safety Assessment		: This product contains substances for which Chemical Safety Assessments are still required.

### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate				
CLF	P = Classification, Labelling and Packaging Regulation [Regulation (EC) No.			
127	2/2008]			
DNE	EL = Derived No Effect Level			
EUH	I statement = CLP-specific Hazard statement			
PNE	C = Predicted No Effect Concentration			
RR	I = REACH Registration Number			
PBT	= Persistent, Bioaccumulative and Toxic			
vPv	B = Very Persistent and Very Bioaccumulative			
LD5	0 = Median lethal dose			
LC5	0 = Median lethal concentration			
EC5	0 = Half maximal effective concentration			
ADF	R = The European Agreement concerning the International Carriage of			
Dan	gerous Goods by Road			
IMD	G = International Maritime Dangerous Goods			
IAT	A = International Air Transport Association			

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Eye Irrit. 2, H319	Regulatory data
Asp. Tox. 1, H304	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements	: H226 H302 H304 H312 H315 H317 H318 H319 H331 H332	Flammable liquid and vapor. Harmful if swallowed. May be fatal if swallowed and enters airways. Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. Toxic if inhaled. Harmful if inhaled.

### **SECTION 16: Other information**

	H360D May damage the unborn child.			
	H372 Causes damage to organs through prolonged or repeated exposure if			
	(inhalation) inhaled.			
	H400 Very toxic to ac	quatic life.		
	H410 Very toxic to aq	uatic life with long lasting effects.		
	H412 Harmful to aqua	atic life with long lasting effects.		
Full text of classifications	: Acute Tox. 3, H331	ACUTE TOXICITY (inhalation) - Category 3		
[CLP/GHS]	Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4		
	Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4		
	Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4		
	Aquatic Acute 1, H400	AQUATIC HAZARD (ACUTE) - Category 1		
	Aquatic Chronic 1, H410	AQUATIC HAZARD (LONG-TERM) - Category 1		
	Aquatic Chronic 3, H412	AQUATIC HAZARD (LONG-TERM) - Category 3		
	Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1		
	EUH066	Repeated exposure may cause skin dryness or cracking.		
	Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1		
	Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2		
	Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3		
	Repr. 1B, H360D	TOXIC TO REPRODUCTION (Unborn child) - Category 1B		
	Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2		
	Skin Sens. 1, H317	SKIN SENSITIZATION - Category 1		
	STOT RE 1, H372	SPECIFIC TARGET ORGAN TOXICITY (REPEATED		
	(inhalation)	EXPOSURE) (inhalation) - Category 1		
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#### Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.