

SAFETY DATA SHEET

Permanent Ink Remover

According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product name	Permanent Ink Remover	
Product number	APIR125, ZA	
1.2. Relevant identified uses	of the substance or mixture and uses advised against	
Identified uses	Cleaning agent.	
Uses advised against	No specific uses advised against are identified.	
1.3. Details of the supplier of	the safety data sheet	
Supplier	AF INTERNATIONAL. A division of HK WENTWORTH LTD ASHBY PARK COALFIELD WAY ASHBY de la ZOUCH LEICESTERSHIRE. LE65 1JR UNITED KINGDOM +44 (0) 1530 419600 +44 (0) 1530 416640 info@hkw.co.uk	
1.4. Emergency telephone nu	mber	
Emergency telephone	IN CASE OF EMERGENCY CALL: +44 1865 407333 (24hr, Provided by Carechem 24) +353 (0)1 809 2166 (Beaumont Hospital, Republic of Ireland only, 8am-10pm, 7 days a week)	
SECTION 2: Hazards identification		
2.1. Classification of the subs	tance or mixture	
Classification (EC 1272/2008)	$\underline{\mathbf{D}}$	
Physical hazards	Not Classified	
Health hazards	Not Classified	
Environmental hazards	Not Classified	
2.2. Label elements		
Hazard statements	EUH208 Contains 1,2-Benzisothiazol-3(2H)-one, Reaction mass of: 5-chloro-2-methyl-4- isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.	
Precautionary statements	P102 Keep out of reach of children.	
Detergent labelling	< 5% non-ionic surfactants, < 5% perfumes, Contains BENZISOTHIAZOLINONE, METHYLISOTHIAZOLINONE, METHYLCHLOROISOTHIAZOLINONE AND METHYLISOTHIAZOLINONE	
2.3. Other hazards		

This product does not contain any substances classified as PBT or vPvB.

3.2. Mixtures		
Dipropylene Glycol Monome		10-30%
CAS number: 34590-94-8	EC number: 252-104-2	REACH registration number: 01- 2119450011-60-XXXX
Classification Not Classified		
The full text for all hazard stat	ements is displayed in Section 16.	
SECTION 4: First aid measur	es	
4.1. Description of first aid me	pasures	
General information	If in doubt, get medical attention promptly. S personnel.	how this Safety Data Sheet to the medical
Inhalation	-	ion or coughing persists, proceed as follows. warm and at rest in a position comfortable for ar, tie or belt. Get medical attention if any
Ingestion	No specific recommendations. If throat irritat Rinse mouth. Get medical attention if any dis	ion or coughing persists, proceed as follows. scomfort continues.
Skin contact	No specific recommendations. Rinse with wa continues.	ater. Get medical attention if any discomfort
Eye contact	Rinse with water. Get medical attention if an	y discomfort continues.
Protection of first aiders	Use protective equipment appropriate for sur	rrounding materials.
4.2. Most important symptoms	s and effects, both acute and delayed	
General information	The severity of the symptoms described will length of exposure.	vary dependent on the concentration and the
Inhalation	No specific symptoms known. Spray/mists m	nay cause respiratory tract irritation.
Ingestion	No specific symptoms known. May cause dis	scomfort if swallowed.
Skin contact	No specific symptoms known. May cause dis	scomfort.
Eye contact	No specific symptoms known. May be slightl	y irritating to eyes.
4.3. Indication of any immedia	ate medical attention and special treatment nee	ded
Notes for the doctor	Treat symptomatically.	
Specific treatments	No special treatment required.	
SECTION 5: Firefighting mea	sures	
5.1. Extinguishing media		
Suitable extinguishing media	The product is not flammable. Extinguish wit powder or water fog. Use fire-extinguishing r	h alcohol-resistant foam, carbon dioxide, dry nedia suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as th	his will spread the fire.

5.2. Special hazards arising fro	om the substance or mixture
Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.
5.3. Advice for firefighters	
Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.
SECTION 6: Accidental releas	e measures
6.1. Personal precautions, pro	tective equipment and emergency procedures
Personal precautions	No specific recommendations. For personal protection, see Section 8.
6.2. Environmental precaution	<u>s</u>
Environmental precautions	Avoid discharge into drains or watercourses or onto the ground.
6.3. Methods and material for	containment and cleaning up
Methods for cleaning up	Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.
6.4. Reference to other section	ns
Reference to other sections	For personal protection, see Section 8.
SECTION 7: Handling and sto	rage
7.1. Precautions for safe hand	ling
Usage precautions	Keep out of the reach of children. Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.
7.2. Conditions for safe storag	e, including any incompatibilities
Storage precautions	No specific recommendations.
Storage class	Unspecified storage.
7.3. Specific end use(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
SECTION 8: Exposure control	s/Personal protection
8.1. Control parameters	
Occupational exposure limits	

5.2. Special hazards arising from the substance or mixture

Dipropylene Glycol Monomethyl Ether

Long-term exposure limit (8-hour TWA): WEL 50 ppm 308 mg/m³ Sk

Methanol

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³ Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³ Sk

2,6-Di-tert-butyl-p-cresol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ WEL = Workplace Exposure Limit Sk = Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls	No specific ventilation requirements.
Eye/face protection	No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.
Hand protection	No specific requirements are anticipated under normal conditions of use. No specific hand protection recommended.
Hygiene measures	Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.
Respiratory protection	No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Not regarded as dangerous for the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Characteristic. Citrus.
Odour threshold	Not available.
рН	Not available.
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Other flammability	Not available.
Vapour pressure	Not available.

Vapour density	Not available.
Relative density	Not available.
Bulk density	Not available.
Solubility(ies)	Not available.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.
9.2. Other information	
SECTION 10: Stability and rea	activity
10.1. Reactivity	
Reactivity	There are no known reactivity hazards associated with this product.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
10.3. Possibility of hazardous	reactions
Possibility of hazardous reactions	No potentially hazardous reactions known.
10.4. Conditions to avoid	
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
10.5. Incompatible materials	
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
10.6. Hazardous decomposition	on products
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.
SECTION 11: Toxicological in	formation
11.1. Information on toxicolog	ical effects
Toxicological effects	Not regarded as a health hazard under current legislation.
Acute toxicity - oral	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Notes (inhalation LC ₅₀)	Based on available data the classification criteria are not met.
Skin corrosion/irritation	

Animal data	Based on available data the classification criteria are not met.	
Serious eye damage/irritation Serious eye damage/irritation	Based on available data the classification criteria are not met.	
Respiratory sensitisation Respiratory sensitisation	Based on available data the classification criteria are not met.	
Skin sensitisation Skin sensitisation	Based on available data the classification criteria are not met.	
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.	
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.	
IARC carcinogenicity	Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable as to its carcinogenicity to humans.	
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.	
Reproductive toxicity - development	Based on available data the classification criteria are not met.	
Specific target organ toxicity - single exposure		
Specific target organ toxicity -	single exposure	
Specific target organ toxicity - STOT - single exposure	single exposure Not classified as a specific target organ toxicant after a single exposure.	
	Not classified as a specific target organ toxicant after a single exposure.	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.	
STOT - single exposure Specific target organ toxicity -	Not classified as a specific target organ toxicant after a single exposure. repeated exposure	
STOT - single exposure Specific target organ toxicity - STOT - repeated exposure Aspiration hazard	Not classified as a specific target organ toxicant after a single exposure. repeated exposure Not classified as a specific target organ toxicant after repeated exposure.	
STOT - single exposure Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard	Not classified as a specific target organ toxicant after a single exposure. repeated exposure Not classified as a specific target organ toxicant after repeated exposure. Based on available data the classification criteria are not met. No specific health hazards known. The severity of the symptoms described will vary	
STOT - single exposure Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information	Not classified as a specific target organ toxicant after a single exposure. repeated exposure Not classified as a specific target organ toxicant after repeated exposure. Based on available data the classification criteria are not met. No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
STOT - single exposure Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information	Not classified as a specific target organ toxicant after a single exposure. repeated exposure Not classified as a specific target organ toxicant after repeated exposure. Based on available data the classification criteria are not met. No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. No specific symptoms known. Spray/mists may cause respiratory tract irritation.	
STOT - single exposure Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information Inhalation Ingestion	Not classified as a specific target organ toxicant after a single exposure. repeated exposure Not classified as a specific target organ toxicant after repeated exposure. Based on available data the classification criteria are not met. No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. No specific symptoms known. Spray/mists may cause respiratory tract irritation. No specific symptoms known. May cause discomfort if swallowed.	
STOT - single exposure Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information Inhalation Ingestion Skin contact	Not classified as a specific target organ toxicant after a single exposure. repeated exposure Not classified as a specific target organ toxicant after repeated exposure. Based on available data the classification criteria are not met. No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. No specific symptoms known. Spray/mists may cause respiratory tract irritation. No specific symptoms known. May cause discomfort if swallowed. No specific symptoms known. May cause discomfort.	
STOT - single exposure Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information Inhalation Ingestion Skin contact Eye contact	Not classified as a specific target organ toxicant after a single exposure. repeated exposure Not classified as a specific target organ toxicant after repeated exposure. Based on available data the classification criteria are not met. No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. No specific symptoms known. Spray/mists may cause respiratory tract irritation. No specific symptoms known. May cause discomfort if swallowed. No specific symptoms known. May cause discomfort. No specific symptoms known. May be slightly irritating to eyes.	

Dipropylene Glycol Monomethyl Ether

Toxicological effects	Not regarded as a health hazard under current legislation.
Acute toxicity - oral	
Notes (oral LD ₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal	

Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritati	ion
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxici	ty - single exposure
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxicit	ty - repeated exposure
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known. Spray/mists may cause respiratory tract irritation.
Ingestion	No specific symptoms known. May cause discomfort if swallowed.
Skin contact	No specific symptoms known. May cause discomfort.
Eye contact	No specific symptoms known. May be slightly irritating to eyes.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.

Methanol

Acute toxicity - oral	
Notes (oral LD₅₀)	Acute Tox. 3 - H301 Toxic if swallowed.
ATE oral (mg/kg)	100.0
Acute toxicity - dermal	
Notes (dermal LD₅₀)	Acute Tox. 3 - H311 Toxic in contact with skin.
ATE dermal (mg/kg)	300.0
Acute toxicity - inhalation	
Notes (inhalation LC ₅₀)	Acute Tox. 3 - H331 Toxic if inhaled.
ATE inhalation (gases ppm)	700.0
ATE inhalation (vapours mg/l)	3.0
ATE inhalation (dusts/mists mg/l)	0.5
Skin corrosion/irritation	
Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritati	on
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxicity - single exposure	
STOT - single exposure	STOT SE 1 - H370 Causes damage to organs .
Specific target organ toxicit	y - repeated exposure
0707	

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Drowsiness, dizziness, disorientation, vertigo. Unconsciousness. High concentrations may be fatal.
Ingestion	May cause stomach pain or vomiting. May cause severe internal injury.
Skin contact	A single exposure may cause the following adverse effects: Pain.
Eye contact	No specific symptoms known.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
	d-Limonene
Acute toxicity - oral	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC50)	Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Irritating.
Serious eye damage/irritat	ion
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	May cause skin sensitisation or allergic reactions in sensitive individuals.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	DNA damage and/or repair: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.

Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxici	ty - single exposure
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxicit	ty - repeated exposure
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. May cause irritation.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to skin.
Eye contact	No specific symptoms known.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.
	Pin-2(3)-ene
Acute toxicity - oral	
Notes (oral LD₅∞)	Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC ₅₀)	Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Irritating.
Human skin model test	Cell Viability 39.6% 15 minutes REACH dossier information. Irritating.
Serious eye damage/irritati	ion
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	May cause skin sensitisation or allergic reactions in sensitive individuals.
Germ cell mutagenicity	

Genotoxicity - in vitro	Based on available data the classification criteria are not met.		
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.		
Carcinogenicity			
Carcinogenicity	Based on available data the classification criteria are not met.		
IARC carcinogenicity	None of the ingredients are listed or exempt.		
Reproductive toxicity			
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.		
Reproductive toxicity - development	Based on available data the classification criteria are not met.		
Specific target organ toxicit	y - single exposure		
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.		
Specific target organ toxicit	y - repeated exposure		
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.		
Aspiration hazard			
Aspiration hazard	Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways. Pneumonia may be the result if vomited material containing solvents reaches the lungs.		
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.		
Inhalation	No specific symptoms known.		
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. May cause irritation. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.		
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to skin.		
Eye contact	No specific symptoms known.		
Route of exposure	Ingestion Inhalation Skin and/or eye contact		
Target organs	No specific target organs known.		
Medical considerations	Skin disorders and allergies.		
	Citral		
Acute toxicity - oral			
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.		
Acute toxicity - dermal			
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.		
Acute toxicity - inhalation			
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.		

Skin corrosion/irritation	
Animal data	Irritating.
Serious eye damage/irritati	ion
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	May cause skin sensitisation or allergic reactions in sensitive individuals.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxici	ty - single exposure
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxici	ty - repeated exposure
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. May cause irritation.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to skin.
	No oposifia symptoma known
Eye contact	No specific symptoms known.
Eye contact Route of exposure	Ingestion Inhalation Skin and/or eye contact

Medical considerations	Skin disorders and allergies.			
Pin-2(10)-ene				
Acute toxicity - oral				
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.			
Acute toxicity - dermal				
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.			
Acute toxicity - inhalation				
Notes (inhalation LC50)	Based on available data the classification criteria are not met.			
Skin corrosion/irritation				
Animal data	Irritating.			
Human skin model test	Cell Viability 38.5% 15 minutes REACH dossier information. Irritating.			
Serious eye damage/irritat	ion			
Serious eye damage/irritation	Based on available data the classification criteria are not met.			
Respiratory sensitisation				
Respiratory sensitisation	Based on available data the classification criteria are not met.			
Skin sensitisation				
Skin sensitisation	May cause skin sensitisation or allergic reactions in sensitive individuals.			
Germ cell mutagenicity				
Genotoxicity - in vitro	Based on available data the classification criteria are not met.			
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.			
Carcinogenicity				
Carcinogenicity	Based on available data the classification criteria are not met.			
IARC carcinogenicity	None of the ingredients are listed or exempt.			
Reproductive toxicity				
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.			
Reproductive toxicity - development	Based on available data the classification criteria are not met.			
Specific target organ toxicity - single exposure				
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.			
Specific target organ toxicity - repeated exposure				
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.			
Aspiration hazard				
Aspiration hazard	Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways. Pneumonia may be the result if vomited material containing solvents reaches the lungs.			

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. May cause irritation. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to skin.
Eye contact	No specific symptoms known.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.
	2,6-Di-tert-butyl-p-cresol
Toxicological effects	Not regarded as a health hazard under current legislation.
Acute toxicity - oral	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritati	ion
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.			
Reproductive toxicity - development	Based on available data the classification criteria are not met.			
Specific target organ toxicit	y - single exposure			
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.			
Specific target organ toxicit	y - repeated exposure			
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.			
Aspiration hazard				
Aspiration hazard	Not relevant. Solid.			
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.			
Inhalation	No specific symptoms known.			
Ingestion	No specific symptoms known.			
Skin contact	Prolonged contact may cause dryness of the skin.			
Eye contact	No specific symptoms known.			
Route of exposure	Ingestion Inhalation Skin and/or eye contact			
Target organs	No specific target organs known.			
12: Ecological information				

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

SECTION 1

Ecotoxicity

Dipropylene Glycol Monomethyl Ether

Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.			
	Methanol			
Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.			
	<u>Pin-2(3)-ene</u>			
Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.			
	Citral			
Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.			
ioit (

Toxicity	Based on available data the classification criteria are not met.			
Ecological	logical information on ingredients.			
	Dipropylene Glycol Monomethyl Ether			
	Toxicity Based on available data the classification criteria are not met.			
	Acute aquatic toxicity			
	Acute toxicity - fish	LC₅₀, 96 hours: > 1000 mg/l, Poecilia reticulata (Guppy)		
		Methanol		
	Toxicity	Based on available data the classification criteria are not met.		
		d-Limonene		
	Toxicity	Aquatic Acute 1 - H400 Very toxic to aquatic life. Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.		
	Acute aquatic toxicity			
	LE(C)∞	$0.1 < L(E)C50 \le 1$		
	M factor (Acute)	1		
	Acute toxicity - fish	LC₅₀, 96 hours: 0.72 mg/l, Pimephales promelas (Fat-head Minnow)		
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 0.36 mg/l, Daphnia magna		
	Acute toxicity - aquatic plants	EC₅₀, 72 hours: 150 mg/l, Desmodesmus subspicatus		
	Acute toxicity - microorganisms	EC₅₀, 3 hours: 209 mg/l, Activated sludge		
	Chronic aquatic toxicity			
	M factor (Chronic)	1		
		Pin-2(3)-ene		
	Toxicity	Aquatic Acute 1 - H400 Very toxic to aquatic life. Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.		
	Acute aquatic toxicity			
	LE(C)∞	$0.1 < L(E)C50 \le 1$		
	M factor (Acute)	1		
	Chronic aquatic toxicity			
	M factor (Chronic)	1		
		Citral		
	Toxicity	Based on available data the classification criteria are not met.		
	Acute aquatic toxicity			
	Acute toxicity - fish	LC₅₀, 96 hours: 6.78 mg/l, Leuciscus idus (Golden orfe)		

Acute toxicity invertebrates		EC₅₀, 48 hours: 6.8 mg/l, Daphnia magna		
Acute toxicity plants	y - aquatic	EC₅₀, 72 hours: 103.8 mg/l, Scenedesmus subspicatus		
		Pin-2(10)-ene		
Toxicity		Aquatic Acute 1 - H400 Very toxic to aquatic life. Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.		
Acute aquati	c toxicity			
LE(C)50		$0.1 < L(E)C50 \le 1$		
M factor (Act	ute)	1		
Acute toxicity	y - fish	LC₅₀, 96 hours: 0.557 mg/l, Cyprinus carpio (Common carp)		
Acute toxicity invertebrates		EC₅₀, 48 hours: 1.25 mg/l, Daphnia magna		
Acute toxicity plants	y - aquatic	EC₅₀, 48 hours: 0.826 mg/l, Pseudokirchneriella subcapitata		
Chronic aqua	atic toxicity			
M factor (Ch	ronic)	1		
		2,6-Di-tert-butyl-p-cresol		
Toxicity		Aquatic Acute 1 - H400 Very toxic to aquatic life. Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.		
Acute aquati	c toxicity			
LE(C)50		$0.1 < L(E)C50 \le 1$		
M factor (Act	ute)	1		
Acute toxicity invertebrates	-	EC₅₀, 48 hours: 0.48 mg/l, Daphnia magna		
Chronic aqua	atic toxicity			
M factor (Ch	ronic)	1		
12.2. Persistence and degradability				
Persistence and degradability The degradability of the product is not known.				
Ecological information on	ingredients.			
		Dipropylene Glycol Monomethyl Ether		
Persistence degradability		The degradability of the product is not known.		
		Methanol		
Persistence		The degradability of the product is not known.		

degradability

d-Limonene

-	Persistence and degradability		The degradability of the product is not known.
F	Phototransformati	on	Water - Half-life : 0.365 hours Estimated value.
E	Biodegradation		Water - Degradation 80%: 28 days
			Pin-2(3)-ene
-	Persistence and degradability		The degradability of the product is not known.
F	Phototransformati	on	Water - DT ₅₀ : 0.44-1.41 hours
			Citral
-	Persistence and degradability		The degradability of the product is not known.
F	Phototransformati	on	Water - DT ₅₀ : 37.35 minutes
E	Biodegradation		Water - Degradation 85-95%: 28 days
			Pin-2(10)-ene
-	Persistence and degradability		The degradability of the product is not known.
E	Biodegradation		Water - Degradation 76%: 28 days
			2,6-Di-tert-butyl-p-cresol
-	Persistence and degradability		The degradability of the product is not known.
F	Phototransformati	on	Water - DT₅₀ : 7 hours Estimated value.
E	Biodegradation		Water - Degradation 4.5%: 28 days
12.3. Bioaccu	mulative potentia	<u> </u>	
Bioaccumulati	ive potential	No data	available on bioaccumulation.
Partition coefficient Not avail		Not avail	lable.
Ecological info	ormation on ingre	dients.	
			Dipropylene Glycol Monomethyl Ether
E	Bioaccumulative p	otential	No data available on bioaccumulation.

Methanol

Bioaccumulative potential No data available on bioaccumulation.

d-Limonene

	Bioaccumulative potential	No data available on bioaccumulation.
	Partition coefficient	log Pow: 4.38
		Pin-2(3)-ene
	Bioaccumulative potential	No data available on bioaccumulation.
	Partition coefficient	log Pow: 4.487
		Citral
	Bioaccumulative potential	No data available on bioaccumulation.
	Partition coefficient	log Pow: 2.76
		Pin-2(10)-ene
	Bioaccumulative potential	No data available on bioaccumulation.
	Partition coefficient	log Pow: 4.425
		2,6-Di-tert-butyl-p-cresol
	Bioaccumulative potential	No data available on bioaccumulation.
	Partition coefficient	log Pow: 5.1
12.4. Mobil	ity in soil	
Mobility	No data	available.
-	No data	available.
-		available. Dipropylene Glycol Monomethyl Ether
-		
-	nformation on ingredients.	Dipropylene Glycol Monomethyl Ether
-	nformation on ingredients.	Dipropylene Glycol Monomethyl Ether No data available.
-	nformation on ingredients. Mobility	Dipropylene Glycol Monomethyl Ether No data available. <u>Methanol</u>
-	nformation on ingredients. Mobility	Dipropylene Glycol Monomethyl Ether No data available. <u>Methanol</u> No data available.
-	nformation on ingredients. Mobility Mobility	Dipropylene Glycol Monomethyl Ether No data available. <u>Methanol</u> No data available. <u>d-Limonene</u>
-	Mobility Mobility Mobility Mobility Adsorption/desorption	Dipropylene Glycol Monomethyl Ether No data available. <u>Methanol</u> No data available. <u>d-Limonene</u> No data available.
-	Mobility Mobility Mobility Mobility Adsorption/desorption	Dipropylene Glycol Monomethyl Ether No data available. <u>Methanol</u> No data available. <u>d-Limonene</u> No data available. Water - Koc: 1984 @ 25°C
-	Mobility Mobility Mobility Mobility Adsorption/desorption coefficient	Dipropylene Glycol Monomethyl Ether No data available. <u>Methanol</u> No data available. <u>d-Limonene</u> No data available. Water - Koc: 1984 @ 25°C <u>Pin-2(3)-ene</u>
-	Mobility Mobility Mobility Mobility Adsorption/desorption coefficient Mobility Adsorption/desorption	Dipropylene Glycol Monomethyl Ether No data available. <u>Methanol</u> No data available. <u>d-Limonene</u> No data available. Water - Koc: 1984 @ 25°C <u>Pin-2(3)-ene</u> No data available.
-	Mobility Mobility Mobility Mobility Adsorption/desorption coefficient Mobility Adsorption/desorption	Dipropylene Glycol Monomethyl Ether No data available. Methanol No data available. Mater - Koc: 1984 @ 25°C No data available. Water - Koc: 2184 @ 25°C Estimated value.

	Adsorption/desorption	Water - Log Koc: 2.169 @ 25°C Estimated value.
	coefficient	
	Henry's law constant	0.000376 atm m³/mol @ 25°C
		Pin-2(10)-ene
	Mobility	No data available.
	Adsorption/desorption coefficient	Water - Koc: 2080 @ 25°C Estimated value.
		2,6-Di-tert-butyl-p-cresol
	Mobility	No data available.
	Henry's law constant	0.342 Pa m³/mol @ 25°C
12.5. Resu	ts of PBT and vPvB assess	nent
Ecological i	information on ingredients.	
		d-Limonene
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria. Estimated value.
		<u>Pin-2(3)-ene</u>
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
		Citral
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
		Pin-2(10)-ene
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
		2,6-Di-tert-butyl-p-cresol
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
12.6. Other	adverse effects	
Other adve	rse effects None kr	nown.
Ecological i	information on ingredients.	
		Dipropylene Glycol Monomethyl Ether
	Other adverse effects	None known.
		Methanol

Other adverse effects

None known.

		d-Limonene	
Other adverse ef	ects No	one known.	
		Pin-2(3)-ene	
Other adverse ef	ects No	one known.	
		Citral	
Other adverse ef	e cts No	one known.	
		Pin-2(10)-ene	
Other adverse ef	ooto Nr	one known.	
		2,6-Di-tert-butyl-p-cresol	
Other adverse ef	e cts No	one known.	
SECTION 13: Disposal consid	rations		
13.1. Waste treatment method	3		
General information	-	tion of waste should be minimised or avoided wherever possible. Reuse or recycle nerever possible. This material and its container must be disposed of in a safe	
Disposal methods	way. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.		
SECTION 14: Transport inform	ation		
General		t is not covered by international regulations on the transport of dangerous goods A, ADR/RID).	
14.1. UN number			
Not applicable.			
14.2. UN proper shipping nam	<u>)</u>		
Not applicable.			
14.3. Transport hazard class(e	<u>s)</u>		
No transport warning sign requ	ired.		
14.4. Packing group			
Not applicable.			
14.5. Environmental hazards			
Environmentally hazardous su No.	stance/marir	ne pollutant	
14.6. Special precautions for u	ser		
Not applicable.			
14.7. Transport in bulk accordi	ng to Annex I	II of MARPOL and the IBC Code	

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National regulations	Health and Safety at Work etc. Act 1974 (as amended).
national rogalationo	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
	The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment
	Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of
	Chemicals (REACH) (as amended).
	Commission Regulation (EU) No 453/2010 of 20 May 2010.
	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16
	December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
	Dangerous Preparations Directive 1999/45/EC.
	Dangerous Substances Directive 67/548/EEC.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Training advice	Read and follow manufacturer's recommendations.
Issued by	Bethan Massey
Revision date	08/04/2019
Revision	1
SDS number	257
Hazard statements in full	EUH208 Contains 1,2-Benzisothiazol-3(2H)-one, Reaction mass of: 5-chloro-2-methyl-4- isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.