## SAFETY DATA SHEET Pre Saturated Wipes Refill 100pk

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	Pre Saturated Wipes Refill 100pk	
Product number	322.263, ZP	
Internal identification	APCC100RLYR_EU	
1.2. Relevant identified uses of	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 t	the safety data sheet	
Supplier	LYRECO Rue du 19 mars 1962, F-59770, Marly, France msds@lyreco.com +33 (0) 3 27 23 64 00	
1.4. Emergency telephone nu	mber	
Emergency telephone	+44 1865 407333	
SECTION 2: Hazards identific	ation	
2.1. Classification of the subst	tance or mixture	
Classification (EC 1272/2008)		
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% perfumes, Contains BENZISOTHIAZOLINONE, METHYLISOTHIAZOLINONE, METHYLCHLOROISOTHIAZOLINONE AND METHYLISOTHIAZOLINONE	
2.3. Other hazards		
This product does not contain	any substances classified as PBT or vPvB.	
SECTION 3: Composition/information on ingredients		
3.2. Mixtures		
Composition comments	None of the ingredients are required to be listed	

**Composition comments** None of the ingredients are required to be listed.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.		
Inhalation	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.		
Ingestion	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.		
Skin contact	No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.		
Eye contact	Rinse with water. Get medical attention if any discomfort continues.		
Protection of first aiders	Use protective equipment appropriate for surrounding materials.		
4.2. Most important symptoms	and effects, both acute and delayed		
General information	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.		
4.3. Indication of any immedia	4.3. Indication of any immediate medical attention and special treatment needed		
Notes for the doctor	Treat symptomatically.		
Specific treatments	No special treatment required.		
SECTION 5: Firefighting meas	sures		
5.1. Extinguishing media			
Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.		
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.		
5.2. Special hazards arising from 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 release measures

6.1. Personal precautions, pro	otective equipment and emergency procedures
Personal precautions	No specific recommendations. For personal protection, see Section 8.
6.2. Environmental precaution	<u>15</u>
Environmental precautions	Avoid discharge to the aquatic environment.
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	ins
Reference to other sections	For personal protection, see Section 8.
SECTION 7: Handling and sto	orage
7.1. Precautions for safe hand	alling
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. Avoid discharge to the aquatic environment.
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 storage	ge, 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 Contro	ols/personal protection
8.1 Control parameters	

## 8.1. Control parameters

### Occupational exposure limits

### 2-Butoxyethanol

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m<sup>3</sup> Sk

### 1-Methoxy-2-propanol

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m<sup>3</sup> Sk

## Ethanol

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m<sup>3</sup>

### **Diethyl phthalate**

Long-term exposure limit (8-hour TWA): WEL 5 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 10 mg/m<sup>3</sup> 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 hand protection recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
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

	historia
Appearance	Liquid-impregnated wipe.
Colour	Colourless.
Odour	Alcoholic.
Odour threshold	Not available.
рН	pH (concentrated solution): 5-7
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	2.35 kPa @ 20°C
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	
<u>10.1. Reactivity</u> 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 products		
10.6. Hazardous decomposition	on products	
10.6. Hazardous decomposition Hazardous decomposition products	on products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.	
Hazardous decomposition	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.	
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.	
Hazardous decomposition products SECTION 11: Toxicological in	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.	
Hazardous decomposition products SECTION 11: Toxicological in 11.1. Information on toxicolog	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. formation ical effects	
Hazardous decomposition products SECTION 11: Toxicological in 11.1. Information on toxicolog Toxicological effects Acute toxicity - oral	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. formation ical effects Not regarded as a health hazard under current legislation.	
Hazardous decomposition products SECTION 11: Toxicological in 11.1. Information on toxicolog Toxicological effects Acute toxicity - oral Notes (oral LD <sub>50</sub> ) Acute toxicity - dermal	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. formation ical effects Not regarded as a health hazard under current legislation. Based on available data the classification criteria are not met.	
Hazardous decomposition products SECTION 11: Toxicological in 11.1. Information on toxicolog Toxicological effects <u>Acute toxicity - oral</u> Notes (oral LD <sub>50</sub> ) <u>Acute toxicity - dermal</u> Notes (dermal LD <sub>50</sub> ) <u>Acute toxicity - inhalation</u>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. formation ical effects Not regarded as a health hazard under current legislation. Based on available data the classification criteria are not met. Based on available data the classification criteria are not met.	
Hazardous decomposition products         SECTION 11: Toxicological in 11.1. Information on toxicolog         Toxicological effects         Acute toxicity - oral Notes (oral LD <sub>50</sub> )         Acute toxicity - dermal Notes (dermal LD <sub>50</sub> )         Acute toxicity - inhalation Notes (inhalation LC <sub>50</sub> )         Skin corrosion/irritation	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. formation ical effects Not regarded as a health hazard under current legislation. Based on available data the classification criteria are not met. Based on available data the classification criteria are not met. Based on available data the classification criteria are not met.	
Hazardous decomposition products         SECTION 11: Toxicological in 11.1. Information on toxicolog         Toxicological effects         Acute toxicity - oral         Notes (oral LD <sub>50</sub> )         Acute toxicity - dermal         Notes (dermal LD <sub>50</sub> )         Acute toxicity - inhalation         Notes (inhalation LC <sub>50</sub> )         Skin corrosion/irritation         Animal data         Serious eye damage/irritation	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.  formation  ical effects Not regarded as a health hazard under current legislation.  Based on available data the classification criteria are not met.  Based on available data the classification criteria are not met.  Based on available data the classification criteria are not met.  Based on available data the classification criteria are not met.  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/a group of substances which may cause cancer. IARC Group 1 Carcinogenic 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
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	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 entry	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.

Toxicological information on ingredients.

## 2-Butoxyethanol

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	1,746.0
Species	Rat
Notes (oral LD₅₀)	REACH dossier information. Harmful if swallowed.
ATE oral (mg/kg)	1,746.0
Acute toxicity - dermal	
Notes (dermal LD₅₀)	cATpE: Converted Acute Toxicity Point Estimate. Harmful in contact with skin.
ATE dermal (mg/kg)	1,100.0
Acute toxicity - inhalation	
Notes (inhalation LC <sub>50</sub> )	cATpE: Converted Acute Toxicity Point Estimate. Harmful if inhaled.

ATE inhalation (vapours	11.0	
mg/l)		
Skin corrosion/irritation		
Animal data	Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: No oedema (0). REACH dossier information. Irritating.	
Serious eye damage/irritat	ion	
Serious eye damage/irritation	Dose: 0.1 mL, 24 hours, Rabbit Causes serious eye irritation.	
Skin sensitisation		
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. 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	NOAEC 125 ppm, Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.	
Reproductive toxicity		
Reproductive toxicity - fertility	Two-generation study - NOAEL 720 mg/kg/day, Oral, Mouse P REACH dossier information. Based on available data the classification criteria are not met.	
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 50 ppm, Inhalation, Rabbit REACH dossier information. Based on available data the classification criteria are not met.	
Specific target organ toxicity - repeated exposure		
STOT - repeated exposure	NOAEL <69 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.	
	1-Methoxy-2-propanol	
Acute toxicity - oral		
Acute toxicity oral (LD₅₀ mg/kg)	3,739.0	
Species	Rat	
Notes (oral LD₅₀)	$LD_{50}$ 3739 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.	
ATE oral (mg/kg)	3,739.0	
Acute toxicity - dermal		
Notes (dermal LD₅₀)	LD₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Skin corrosion/irritation		

Animal data	Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.	
Skin sensitisation		
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. 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	NOEL 3000 ppm, Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.	
Reproductive toxicity		
Reproductive toxicity - fertility	Two-generation study - NOAEL 1000 ppm, Inhalation, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.	
Reproductive toxicity - development	Teratogenicity: - NOAEL: 1500 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Specific target organ toxicity - single exposure		
STOT - single exposure	STOT SE 3 - H336 May cause drowsiness or dizziness. REACH dossier information.	
Target organs	Central nervous system Brain	
Specific target organ toxicit	ty - repeated exposure	
STOT - repeated exposure	NOAEL 919 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.	
	2-Methoxypropanol	
Acute toxicity - oral		
Notes (oral LD₅₀)	$LD_{50}$ 5710 mg/kg, Oral, Rat Based on available data the classification criteria are not met.	
Acute toxicity - dermal		
Notes (dermal LD₅₀)	$LD_{50}$ 5660 mg/kg, Dermal, Rabbit Based on available data the classification criteria are not met.	
Skin corrosion/irritation		
Skin corrosion/irritation	Irritating to skin.	
Serious eye damage/irritati	on	
Serious eye damage/irritation	May cause serious eye damage.	
Reproductive toxicity		
Reproductive toxicity - development	Maternal toxicity: - Dose level:: 545 ppm, Inhalation, Rabbit May damage the unborn child.	

Specific target organ toxicity - single exposure		
STOT - single exposure	STOT SE 3 - H335 May cause respiratory system irritation.	
Target organs	Respiratory system, lungs	
	Ethanol	
Toxicological effects	Not regarded as a health hazard under current legislation.	
Acute toxicity - oral		
Notes (oral LD₅₀)	LD₅₀ 10470 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Acute toxicity - inhalation		
Notes (inhalation LC <sub>50</sub> )	LD₅₀ 124.7 mg/l, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Skin corrosion/irritation		
Animal data	Dose: 0.2 mL, 24 hours, Rabbit Primary dermal irritation index: 0 REACH dossier information. Based on available data the classification criteria are not met.	
Skin sensitisation		
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. 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		
IARC carcinogenicity	IARC Group 1 Carcinogenic to humans.	
Reproductive toxicity		
Reproductive toxicity - fertility	Two-generation study - NOAEL 15% , Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.	
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 16000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Specific target organ toxici	ty - repeated exposure	
STOT - repeated exposure	ELOAEL ~4000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.	
	d-Limonene	
Acute toxicity - oral		
Notes (oral LD₅₀)	LD₅₀ >2000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Skin corrosion/irritation		
Animal data	Dose: 0.5 mL, 4 hours, Rabbit REACH dossier information. Irritating.	
Serious eye damage/irritation		

Serious eye damage/irritation	Dose: 0.1 mL, 7 days, Rabbit REACH dossier information. Not irritating.
Skin sensitisation	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. 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	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
Specific target organ toxici	ty - repeated exposure
STOT - repeated exposure	NOAEL 1650 mg/kg/day, Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.
Aspiration hazard	
Aspiration hazard	1.003 cSt @ 25°C/77°F REACH dossier information. Aspiration hazard if swallowed.
	Diethyl phthalate
Acute toxicity - oral	
Notes (oral LD₅₀)	LD₅₀ >5000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD₅₀)	LD₅₀ 11181 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Dose: 0.5 mL, 24 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Not irritating. REACH dossier information. Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Dose level: >1015 mg/kg/day, Dermal, Rat REACH dossier information. No evidence of carcinogenicity in animal studies.
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEL 3000 ppm, Oral, Rat F1 REACH dossier information. No evidence of reproductive toxicity in animal studies.

Reproductive toxicity - development	Developmental toxicity: - NOAEL: 2.5 %, Oral, Rat REACH dossier information. No evidence of reproductive toxicity in animal studies.		
Specific target organ toxicit	Specific target organ toxicity - repeated exposure		
STOT - repeated exposure	NOAEL 150 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.		
	Citral		
Acute toxicity - oral			
Notes (oral LD₅₀)	LD₅₀ 6800 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.		
Acute toxicity - dermal			
Notes (dermal LD₅₀)	LD₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.		
Skin corrosion/irritation			
Animal data	Dose: 0.5 mL, 15 minutes, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Slight oedema - edges of area well defined by definite raising (2). REACH dossier information. Highly irritating.		
Serious eye damage/irritati	ion		
Serious eye damage/irritation	Dose: 0.1 mL, 8 days, Rabbit Causes serious eye irritation.		
Skin sensitisation			
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Sensitising. REACH dossier information.		
Germ cell mutagenicity			
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. 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	NOAEL 100 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.		
Reproductive toxicity			
Reproductive toxicity - fertility	Screening - NOAEL 1000 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.		
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 200 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.		
	Pin-2(3)-ene		
Skin corrosion/irritation			
Human skin model test	Cell Viability 39.6% 15 minutes REACH dossier information. Irritating.		
Serious eye damage/irritati	ion		
Serious eye damage/irritation	Dose: 0.1 mL, 8 days, Rabbit Based on available data the classification criteria are not met.		

	Skin sensitisation	
	Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information.
	Germ cell mutagenicity	
	Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. 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.
	Aspiration hazard	
	Aspiration hazard	Aspiration hazard if swallowed.
		<u>p-Cymene</u>
	Acute toxicity - oral	
	Notes (oral LD₅₀)	LD₅₀ ~4750 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
	Skin corrosion/irritation	
	Skin corrosion/irritation	Irritating to skin., Defatting, drying and cracking of skin., REACH dossier information.
	Serious eye damage/irrita	tion
	Serious eye damage/irritation	Causes serious eye irritation. REACH dossier information.
	Specific target organ toxicity - single exposure	
	STOT - single exposure	May cause respiratory system irritation.
	Target organs	Respiratory system, lungs
	Aspiration hazard	
	Aspiration hazard	Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
SECTION 1	2: Ecological Information	
Ecotoxicity	-	arded as dangerous for the environment. However, large or frequent spills may have ous effects on the environment.
12.1. Toxici	ty	
<b>Toxicity</b> Based on available data the classification criteria are not met.		
Ecological information on ingredients.		
		2-Butoxyethanol
	Toxicity	Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.
	Acute toxicity - fish	LC₅₀, 96 hours: 1474 mg/l, Onchorhynchus mykiss (Rainbow trout)
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 1550 mg/l, Daphnia magna

Acute toxicity - aquatic plants	EC₅₀, 72 hours: 911 mg/l, Pseudokirchneriella subcapitata	
Chronic toxicity - fish early life stage	NOEL, 21 days: >100 mg/l, Brachydanio rerio (Zebra Fish)	
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 100 mg/l, Daphnia magna	
	1-Methoxy-2-propanol	
Acute toxicity - fish	LC₅₀, 96 hours: 20800 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.	
Acute toxicity - aquatic invertebrates	LC₅₀, 48 hours: 21100 mg/l, Daphnia magna REACH dossier information.	
Acute toxicity - aquatic plants	EC₅₀, 7 days: >1000 mg/l, Selenastrum capricornutum REACH dossier information.	
2-Methoxypropanol		
Acute toxicity - fish	LC₅₀, 96 hours: >1006 mg/l, Fish, Estimated value.	
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: >13205 mg/l, Daphnia magna, Estimated value.	
	Ethanol	
Toxicity	Based on available data the classification criteria are not met.	
Acute toxicity - fish	LC₅₀, 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow)	
Acute toxicity - aquatic invertebrates	LC₅₀, 48 hours: 5012 mg/l, Ceriodaphnia dubia	
Acute toxicity - aquatic plants	EC₅₀, 72 hours: 11.5 mg/l, Chlorella vulgaris	
Chronic toxicity - aquatic invertebrates	NOEC, 9 days: 9.6 mg/l, Daphnia magna	
d-Limonene		
Toxicity	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.	
Acute aquatic toxicity		
LE(C)50	$0.1 < L(E)C50 \le 1$	
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
	Diethyl phthalate
Acute toxicity - fish	LC <sub>50</sub> , 24 hours: 23 mg/l, Onchorhynchus mykiss (Rainbow trout) LC <sub>50</sub> , 48 hours: 14 mg/l, Onchorhynchus mykiss (Rainbow trout) LC <sub>50</sub> , 72 hours: 12 mg/l, Onchorhynchus mykiss (Rainbow trout) LC <sub>50</sub> , 96 hours: 12 mg/l, Onchorhynchus mykiss (Rainbow trout) REACH dossier information.
Acute toxicity - aquatic invertebrates	LC₅₀, 48 hours: 90 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EC <sub>50</sub> , 72 hours: 23 mg/l, Scenedesmus subspicatus REACH dossier information.
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 25 mg/l, Daphnia magna REACH dossier information.
	Citral
Toxicity	Based on available data the classification criteria are not met.
Acute toxicity - fish	LC₅₀, 96 hours: 6.78 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 6.8 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC₅₀, 72 hours: 103.8 mg/l, Scenedesmus subspicatus
	Pin-2(3)-ene
Toxicity	Aquatic toxicity is unlikely to occur.
	p-Cymene
Acute toxicity - fish	LC₅₀, 96 hours: 44 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	LC₅₀, 96 hours: 4.4 mg/l, Americamysis bahia LC₅₀, 48 hours: 6.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC₅₀, 96 hours: 49 mg/l, Pseudokirchneriella subcapitata
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.46 mg/l, Daphnia magna

## 12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

## Ecological information on ingredients.

	2-Butoxyethanol
Persistence and degradability	The substance is readily biodegradable.
Biodegradation	Water - Degradation 90.4%: 28 days
	1-Methoxy-2-propanol
Persistence and degradability	The substance is readily biodegradable.
Phototransformation	Water - DT₅₀:3.1 hours REACH dossier information.
Biodegradation	Water - Degradation 96%: 28 days REACH dossier information.
	2-Methoxypropanol
Biodegradation	No data available.
	Ethanol
Persistence and degradability	The substance is readily biodegradable.
Biodegradation	Water - Degradation 74%: 10 days
Chemical oxygen demand	1.99 g O₂/g substance
Chemical oxygen demand	1.99 g O₂/g substance <u>d-Limonene</u>
Chemical oxygen demand Persistence and degradability	
Persistence and	d-Limonene
Persistence and degradability	<u>d-Limonene</u> The substance is readily biodegradable. Water - Half-life : 0.365 hours
Persistence and degradability Phototransformation	<u>d-Limonene</u> The substance is readily biodegradable. Water - Half-life : 0.365 hours Estimated value.
Persistence and degradability Phototransformation	<u>d-Limonene</u> The substance is readily biodegradable. Water - Half-life : 0.365 hours Estimated value. Water - Degradation 80%: 28 days
Persistence and degradability Phototransformation Biodegradation	<u>d-Limonene</u> The substance is readily biodegradable. Water - Half-life : 0.365 hours Estimated value. Water - Degradation 80%: 28 days <u>Diethyl phthalate</u> Water - DT₅o : 111.1 hours
Persistence and degradability Phototransformation Biodegradation Phototransformation	<u>d-Limonene</u> The substance is readily biodegradable. Water - Half-life : 0.365 hours Estimated value. Water - Degradation 80%: 28 days <u>Diethyl phthalate</u> Water - DT₅o : 111.1 hours REACH dossier information. Water - Degradation >99%: 28 days
Persistence and degradability Phototransformation Biodegradation Phototransformation	<u>d-Limonene</u> The substance is readily biodegradable. Water - Half-life : 0.365 hours Estimated value. Water - Degradation 80%: 28 days <u>Diethyl phthalate</u> Water - DT₅o : 111.1 hours REACH dossier information. Water - Degradation >99%: 28 days REACH dossier information.
Persistence and degradability Phototransformation Biodegradation Phototransformation Biodegradation	<u>d-Limonene</u> The substance is readily biodegradable. Water - Half-life : 0.365 hours Estimated value. Water - Degradation 80%: 28 days <u>Diethyl phthalate</u> Water - DT₅o : 111.1 hours REACH dossier information. Water - Degradation >99%: 28 days REACH dossier information.

## Pin-2(3)-ene

Persistence and degradability	The product is biodegradable.
Phototransformation	Water - DT <sub>50</sub> : 0.44-1.41 hours
	p-Cymene
Biodegradation	Water - Degradation 88%: 14 days
12.3. Bioaccumulative potential	
Bioaccumulative potential No data	available on bioaccumulation.
Partition coefficient Not ava	ilable.
Ecological information on ingredients.	
	2-Butoxyethanol
Bioaccumulative potential	Bioaccumulation is unlikely.
Partition coefficient	log Kow: 0.81
	1-Methoxy-2-propanol
Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	log Pow: <1 REACH dossier information.
	2-Methoxypropanol
Bioaccumulative potential	BCF: ~ 1 - 10, Estimated value. Bioaccumulation is unlikely.
	Ethanol
Bioaccumulative potential	Bioaccumulation is unlikely.
Partition coefficient	log Pow: -0.35
	<u>d-Limonene</u>
Bioaccumulative potential	BCF: 1022, Estimated value.
Partition coefficient	log Pow: 4.38
	Diethyl phthalate
Bioaccumulative potential	BCF: 13.14 L/Kg, Calculation method. REACH dossier information.
Partition coefficient	log Pow: 2.2 REACH dossier information.
	Citral
Bioaccumulative potential	BCF: 89.72, Estimated value. The product is not bioaccumulating.
Partition coefficient	log Pow: 2.76
	Din 2/2) ono

## Pin-2(3)-ene

Bioaccumulative potential BCF: 1845, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 4.487

### p-Cymene

Bioaccumulative potential No data available on bioaccumulation.

## 12.4. Mobility in soil

Mobility

No data available.

Ecological information on ingredients.

## 2-Butoxyethanol

Mobility	The product is miscible with water and may spread in water systems.	
Surface tension	29.53 mN/m @ 20°C	
	1-Methoxy-2-propanol	
Mobility	Mobile.	
Surface tension	70.7 mN/m @ 20°C	
	2-Methoxypropanol	
Mobility	Soluble in water.	
Adsorption/desorption	- log Kow: ~ (-0.45) - (-0.49) @ 25°C Calculation method Log Koc: ~ 0.0 - 1.13 @ 25°C Calculation method.	
	Ethanol	
Mobility	The product is soluble in water.	
Surface tension	24.5 mN/m @ 20°C/68°F	
	d-Limonene	
Mobility	The product is partly soluble in water and may spread in the aquatic environment.	
Adsorption/desorption coefficient	Water - Koc: 1984 @ 25°C	
Diethyl phthalate		
Adsorption/desorption coefficient	Water - Log Koc: 2.34 @ 21°C REACH dossier information.	
Henry's law constant	0.0399 Pa m³/mol @ °C Calculation method. REACH dossier information.	
	Citral	
Mobility	The product is partly soluble in water and may spread in the aquatic environment.	
Adsorption/desorption coefficient	Water - Log Koc: 2.169 @ 25°C Estimated value.	

	Henry's law constant	0.000376 atm m³/mol @ 25°C
		Pin-2(3)-ene
	Mobility	The product is insoluble in water.
	Adsorption/desorption coefficient	Water - Koc: 2184 @ 25°C Estimated value.
		p-Cymene
	Mobility	Volatile liquid. Slightly soluble in water.
12.5. Resul	ts of PBT and vPvB assessn	nent
Ecological i	nformation on ingredients.	
		2-Butoxyethanol
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
		1-Methoxy-2-propanol
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
		2-Methoxypropanol
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
		Ethanol
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
		d-Limonene
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria. Estimated value.
		Diethyl phthalate
	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(3)-ene
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.

## p-Cymene

**Results of PBT and vPvB** This substance is not classified as PBT or vPvB according to current EU criteria. **assessment** 

#### 12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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

#### General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

#### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex 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

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). 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	24/05/2016
Revision	1
SDS number	622
Hazard statements in full	<ul> <li>H225 Highly flammable liquid and vapour.</li> <li>H226 Flammable liquid and vapour.</li> <li>H302 Harmful if swallowed.</li> <li>H312 Harmful in contact with skin.</li> <li>H315 Causes skin irritation.</li> <li>H319 Causes serious eye irritation.</li> <li>H332 Harmful if inhaled.</li> <li>H336 May cause drowsiness or dizziness.</li> <li>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.</li> </ul>

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.