

SAFETY DATA SHEET

Screen-Clene 250ml Pump Spray

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of t	SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier			
Product name	Screen-Clene 250ml Pump Spray		
Product number	ASCS250, ZA		
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 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 identific	ation		
2.1. Classification of the subs	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.

This product does not contain any substances classified as PDT of VPVD.		
SECTION 3: Composition/information on ingredients		
3.2. Mixtures		
Composition comments	None of the ingredients are required to be listed.	
SECTION 4: First aid measure	95	
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	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 symptoms are severe or persist.	
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.	
Skin contact	Rinse with water.	
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.	
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.	
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.	
Ingestion	No specific symptoms known.	
Skin contact	No specific symptoms known.	
Eye contact	No specific symptoms known. May be slightly irritating to eyes.	
4.3. Indication of any immedia	te medical attention and special treatment needed	
Notes for the doctor	Treat symptomatically.	
Specific treatments	No special treatment required.	
SECTION 5: Firefighting measures		
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, protective equipment and emergency procedures

 Personal precautions
 Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material.

6.2. Environmental precautions

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	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. The contaminated absorbent may pose the same hazard as the spilled material. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.
	waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe ha	Indling	
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 storage, including any incompatibilities		
Storage precautions	Store away from incompatible materials (see Section 10). Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.	
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 cont	trols/Personal protection	

8.1. Control parameters

Occupational exposure limits

2-Butoxyethanol

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m³ Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m³ Sk

1-Methoxy-2-propanol

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³ Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³ Sk

Ethanol

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

Diethyl phthalate

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ Short-term exposure limit (15-minute): WEL 10 mg/m³ WEL = Workplace Exposure Limit Sk = Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls	Provide adequate ventilation.
Eye/face protection	Avoid contact with eyes. 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	Keep container tightly sealed when not in use. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	Not determined.
рН	Not determined.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	>55°C Closed cup.
Evaporation rate	Not determined.

Evaporation factor	Not determined.	
Flammability (solid, gas)	Not determined.	
Upper/lower flammability or explosive limits	Not determined.	
Other flammability	Not determined.	
Vapour pressure	Not determined.	
Vapour density	Not determined.	
Relative density	0.997	
Bulk density	Not determined.	
Solubility(ies)	Not determined.	
Partition coefficient	Not determined.	
Auto-ignition temperature	Not determined.	
Decomposition Temperature	Not determined.	
Viscosity	Not determined.	
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	See the other subsections of this section for further details.	
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/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 -	
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.
Aspiration nazaru	based on available data the classification chtena 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	No specific symptoms known.
Skin contact	No specific symptoms known.
Eye contact	No specific symptoms known.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Toxicological information on in	gredients.

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 LC50)	cATpE: Converted Acute Toxicity Point Estimate. Harmful if inhaled.	
ATE inhalation (vapours mg/l)	11.0	
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/irritation		
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 toxici	ty - repeated exposure	
STOT - repeated exposure	NOAEL <60 malkalday. Oral Bat REACH dossier information. Based on available	

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)	LD₅₀ 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 toxicity - 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/irritat	ion
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 toxici	ty - 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_{50})	LD_{50} 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 toxicit	y - repeated exposure	
STOT - repeated exposure	LOAEL ~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 LD₅o)	LD_{50} >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/irritati	on	
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 toxicit	y - 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)	LD_{50} >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 toxici	ty - 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/irritation		
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/irritat	tion	
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.	
p-Cymene		
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/irritation		
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.	
12. Ecological information		

SECTION 12: Ecological information

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

12.1. Toxicity

Toxicity

Based on available data the classification criteria are not met.

Ecological information on ingredients.

invertebrates

2-Butoxyethanol

Toxicity	Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.	
Acute aquatic toxicity		
Acute toxicity - fish	LC_{50} , 96 hours: 1474 mg/l, Oncorhynchus 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 aquatic toxicity		
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 aquatic toxicity		
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 aquatic toxicity		
Acute toxicity - fish	LC₅₀, 96 hours: >1006 mg/l, Fish, Estimated value.	
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >13205 mg/l, Daphnia magna, Estimated value.	
	Ethanol	
Toxicity	Based on available data the classification criteria are not met.	
Acute aquatic toxicity		
Acute toxicity - fish	LC₅₀, 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow)	
Acute toxicity - aquatic	LC₅₀, 48 hours: 5012 mg/l, Ceriodaphnia dubia	

Acute toxicity - aquatic plants	EC₅₀, 72 hours: 11.5 mg/l, Chlorella vulgaris
Chronic aquatic toxicity	
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 ≤ 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 aquatic toxicity	
Acute toxicity - fish	LC ₅₀ , 24 hours: 23 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 48 hours: 14 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 72 hours: 12 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 96 hours: 12 mg/l, Oncorhynchus 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	EC₅₀, 72 hours: 23 mg/l, Scenedesmus subspicatus REACH dossier information.
Chronic aquatic toxicity	
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 aquatic toxicity	
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	$EC_{50},72$ hours: 103.8 mg/l, Scenedesmus subspicatus

Pin-2(3)-ene

Toxicity Aquatic toxicity is unlikely to occur.

p-Cymene

Acute aquatic toxicity

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 aquatic toxicity	
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
		d-Limonene
	Persistence and degradability	The substance is readily biodegradable.
	Phototransformation	Water - Half-life : 0.365 hours Estimated value.
	Biodegradation	Water - Degradation 80%: 28 days
		Diethyl phthalate
	Phototransformation	Water - DT₅₀ : 111.1 hours REACH dossier information.
	Biodegradation	Water - Degradation >99%: 28 days REACH dossier information.
		Citral
	Persistence and degradability	The substance is readily biodegradable.
	Phototransformation	Water - DT₅₀ : 37.35 minutes
	Biodegradation	Water - Degradation 85-95%: 28 days
		Pin-2(3)-ene
	Persistence and degradability	The product is biodegradable.
	Phototransformation	Water - DT₅₀ : 0.44-1.41 hours
		p-Cymene
	Biodegradation	Water - Degradation 88%: 14 days
12.3. Bioac	cumulative potential	
Bioaccumulative potential No data available on bioaccumulation.		
Partition co	efficient Not dete	rmined.
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 Partition coefficient	Bioaccumulation is unlikely. log Pow: -0.35
	r aruuon coenicient	
		d-Limonene
	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
		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. Mobili	ty in soil	
Mobility		available.
Ecological i	nformation 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 coefficient	- 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

2-Methoxypropanol

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

Ethanol

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

d-Limonene

Results of PBT and vPvBThis substance is not classified as PBT or vPvB according to current EU criteria.assessmentEstimated value.

Diethyl phthalate

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

Citral

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

Pin-2(3)-ene

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

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. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	Do not empty into drains. 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 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 2015/830 of 28 May 2015. 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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

amended).

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC₅₀: Lethal Concentration to 50 % of a test population. LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose). EC₅₀: 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Training advice	Read and follow manufacturer's recommendations.
Issued by	Toni Ashford
Revision date	22/08/2018
Revision	1
SDS number	212
Hazard statements in full	 H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. 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.