



### SAFETY DATA SHEET

#### 750ml SUPER PROFESSIONAL WASHROOM CLEANER W11

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

SECTION 1: Identification of the	he substance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	750ml SUPER PROFESSIONAL WASHROOM CLEANER W11
Product number	800-277-0005 W11, 800-277-0033
Container size	750 ml
UFI	UFI: H4CQ-WW6C-G93Y-GM81
1.2. Relevant identified uses of	of the substance or mixture and uses advised against
Identified uses	Detergent. Disinfectant.
Uses advised against	Not for Oral Consumption. Do not use for personal cleansing. Use only for intended applications.
1.3. Details of the supplier of t	he safety data sheet
Supplier	Mirius <sup>™</sup> A Coventry Group Company Woodhams Road Siskin Drive Coventry CV3 4FX
	Coventry Chemicals (Ireland) Limited 4th Floor 8-34 Percy Place Dublin 4 Ireland Tel: +44 (0) 02476 639 739 Fax: +44 (0) 02476 639 717 Email: sales@mirius.com
Contact person	For content of safety data sheet:, sds@mirius.com
1.4. Emergency telephone nu	mber
Emergency telephone	+44 (0) 1865407333 (Strictly for emergencies only: incidents involving damage to human health and/or the environment)
National emergency telephone number	UK: In case of a medical emergency following exposure to a chemical call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 Ireland: National Poisons Information Centre Beaumont Hospital Tel: 01 809 2166 (8:00 a.m. to 10.00 p.m. 7 days a week) Tel: 01 809 2566 (health care professionals)

SECTION 2: Hazards identific	ation
2.1. Classification of the subst	ance or mixture
Classification (SI 2019 No. 72	<u>0)</u>
Physical hazards	Not Classified
Health hazards	Eye Irrit. 2 - H319
Environmental hazards	Not Classified
2.2. Label elements	
Hazard pictograms	
Signal word	Warning
Hazard statements	H319 Causes serious eye irritation.
Precautionary statements	<ul> <li>P264 Wash contaminated skin thoroughly after handling.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337+P313 If eye irritation persists: Get medical advice/ attention.</li> <li>P501 Dispose of contents/ container in accordance with local regulations.</li> </ul>
Supplemental label information	BPR001 Use biocides safely. Always read the label and product information before use.
Contains	CITRIC ACID ANHYDROUS, D-GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES
Biocide Labelling	Contains active substance: Alkyl (C12-16) dimethylbenzyl ammonium chloride (ADBAC/BKC (C12-16)), 0.05 g/100g
Detergent labelling	< 5% disinfectants, < 5% non-ionic surfactants, < 5% perfumes
Supplementary precautionary statements	P102 Keep out of reach of children. P101 If medical advice is needed, have product container or label at hand. P103 Read label before use.
2.3. Other hazards	
as 'Substances of Very High C of the REACH regulation (as a	any substances classified as PBT or vPvB. The mixture does not contain substances classified concern' (SVHC) >0.1% published by the European Chemicals Agency (ECHA) under article 57 mended). This product is not classified as, nor contains substances classed as having ristics at levels >0.1% by weight (according to Regulation (EU) 2018/605).

### SECTION 3: Composition/information on ingredients

3.2. Mixtures		
CITRIC ACID ANHYDROUS		1-5%
CAS number: 77-92-9	EC number: 201-069-1	
Classification		
Eye Irrit. 2 - H319		

D-GLUCOPYRANOSE, OL	IGOMERIC, C8-10 GLYCOSIDES 1-5%
CAS number: 68515-73-1	EC number: 500-220-1
<b>Classification</b> Eye Dam. 1 - H318	
ALKYL (C12-16) DIMETHY CHLORIDE (ADBAC/BKC (	
CAS number: 68424-85-1	EC number: 270-325-2
M factor (Acute) = 10	M factor (Chronic) = 1
Classification Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
	es and Hazard Statements are Displayed in Section 16.
SECTION 4: First aid measu	
4.1. Description of first aid m General information	Provide eyewash station.
Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Rinse immediately with plenty of water. Remove contaminated clothing. Get medical attention if irritation persists after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

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

General information	Provide eyewash station.
Inhalation	Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature.
Ingestion	Unlikely exposure route without abuse. Symptoms will include, Sickness, possible Irritation of GI Tract. A soapy taste may be reported.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Causes eye irritation. Irritation and redness, followed by blurred vision.
4.3. Indication of any imm	ediate medical attention and special treatment needed
Notes for the doctor	No specific recommendations.

apart. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe

or persist after washing. Show this Safety Data Sheet to the medical personnel.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Foam, carbon dioxide or dry powder.
5.2. Special hazards arising fro	om the substance or mixture
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.
5.3. Advice for firefighters	
Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
SECTION 6: Accidental releas	e measures
6.1. Personal precautions, pro	tective equipment and emergency procedures
Personal precautions	For personal protection, see Section 8. Treat the spilled material according to the instructions in the clean-up section. Take care as floors and other surfaces may become slippery.
6.2. Environmental precaution	<u>8</u>
Environmental precautions	Collect and dispose of spillage as indicated in Section 13. Do not discharge into drains or watercourses or onto the ground.
6.3. Methods and material for	containment and cleaning up
Methods for cleaning up	Stop leak if safe to do so. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.
6.4. Reference to other section	IS
Reference to other sections	For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.
SECTION 7: Handling and sto	rage
7.1. Precautions for safe hand	ling
Usage precautions	Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid breathing vapour/spray. Do not mix with other household chemical products. Do not mix with acid.
Advice on general occupational hygiene	Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling. Take off contaminated clothing and wash it before reuse. Use appropriate hand lotion to prevent defatting and cracking of skin.
7.2. Conditions for safe storag	e, including any incompatibilities
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at room temperature. Keep out of the reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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	

#### 8.1. Control parameters

#### CITRIC ACID ANHYDROUS (CAS: 77-92-9)

DNEL	Available hazard data do not support the need for a DNEL to be established for other health effects.
PNEC	<ul> <li>Fresh water; 0.44 mg/l</li> <li>marine water; 0.044 mg/l</li> <li>STP; &gt;1000 mg/l</li> <li>Sediment (Freshwater); 34.6 mg/kg</li> <li>Sediment (Marinewater); 3.46 mg/kg</li> <li>Soil; 33.1</li> </ul>
<u>D-</u>	GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES (CAS: 68515-73-1)
DNEL	Workers - Inhalation; Long term systemic effects: 420 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 595000 mg/kg/day General population - Inhalation; Long term systemic effects: 124 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 357000 mg/kg General population - Oral; Long term systemic effects: 35.7 mg/kg
PNEC	- Fresh water; 0.176 mg/l - marine water; 0.0176 mg/l - Intermittent release; 0.27 mg/l - STP; 560 mg/l - Sediment (Freshwater); 1.516 mg/l - Sediment (Marinewater); 0.152 mg/l
ALKYL (C12-16	) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16)) (CAS: 68424-85-1)
DNEL	Workers - Dermal; Long term systemic effects: 5.7 mg/kg/day Workers - Inhalation; Long term systemic effects: 3.96 mg/m <sup>3</sup> General population - Oral; Long term systemic effects: 3.4 mg/kg/day General population - Dermal; Long term systemic effects: 3.4 mg/kg/day General population - Inhalation; Long term systemic effects: 1.64 mg/m <sup>3</sup>
PNEC	- Fresh water; 0.001 mg/l Intermittent release, Fresh water; 0 mg/l marine water; 0.001 mg/l STP; 0.4 mg/l Sediment (Freshwater); 12.27 mg/kg Sediment (Marinewater); 13.09 mg/kg Soil; 7 mg/kg
8.2. Exposure controls	
Protective equipment	

# Appropriate engineering controls

Personal protection

Provide adequate ventilation.

Data provided here is not a risk/COSHH assessment. It relates to the product as supplied and should be used in developing a risk/COSHH assessment.

Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment that provides appropriate eye and face protection should be worn.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex). Neoprene. Nitrile rubber. Polyethylene. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. A break through time of >60 minutes is suggested. Gloves should be inspected regularly for damage.
Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact. Use appropriate hand lotion to prevent defatting and cracking of skin.
Hygiene measures	Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	Respiratory protection not required.
Environmental exposure controls	Avoid releasing into the environment.

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

	9.1. Information on basic physic	ical and chemical properties
	Appearance	Liquid.
	Colour	Green. Clear.
	Odour	Perfume.
	Odour threshold	Not applicable.
	рН	pH (concentrated solution): 2-3
	Melting point	Not determined.
	Initial boiling point and range	Not determined but expected to be >90 Degrees C.
	Flash point	This product is not flammable.
	Evaporation rate	Not applicable.
_	Evaporation factor	Not applicable.
	Flammability (solid, gas)	Not flammable. This product does not sustain combustion.
	Upper/lower flammability or explosive limits	Not applicable. The product is not flammable or explosive.
	Other flammability	Not applicable.
	Vapour pressure	Not applicable.
	Vapour density	Not applicable.
	Relative density	1.008-1.014 @ 20°C
	Bulk density	Not applicable.
_	Solubility(ies)	Soluble in water.
	Partition coefficient	Not applicable. Not technically possible for a mixture.

Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	No information available.
Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.
Comments	Information given is applicable to the product as supplied.
9.2. Other information	
Other information	Not relevant.
SECTION 10: Stability and rea	activity
10.1. Reactivity	
Reactivity	Under normal storage conditions this product is stable.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures.
10.3. Possibility of hazardous	reactions
Possibility of hazardous reactions	Alkalis. Mixing with Hypochorite Bleach based products will produce toxic Chlorine gas.
10.4. Conditions to avoid	
Conditions to avoid	Avoid exposure to high temperatures or direct sunlight. Avoid contact with Bleach and Alkaline materials.
10.5. Incompatible materials	
Materials to avoid	Avoid contact with hypochlorite bleach products. Do not mix with other cleaning chemicals.
10.6. Hazardous decompositio	on products
Hazardous decomposition products	No known hazardous decomposition products.
SECTION 11: Toxicological int	formation
11.1. Information on toxicologi	cal effects
Toxicological effects	Information given is based on data of the components and of similar products.
<u>Acute toxicity - oral</u> 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 Skin corrosion/irritation	Not classified. Based on available data the classification criteria are not met.

Serious eye damage/irritation	Causes serious ave irritation. Calculation method
Serious eye damage/irritation	Causes serious eye irritation. Calculation method.
Respiratory sensitisation Respiratory sensitisation	Not sensitising. Based on available data the classification criteria are not met.
Skin sensitisation Skin sensitisation	Not classified. Based on available data the classification criteria are not met.
Germ cell mutagenicity Genotoxicity - in vitro	Does not contain any substances known to be mutagenic.
Carcinogenicity Carcinogenicity	Does not contain any substances known to be carcinogenic.
Reproductive toxicity	
Reproductive toxicity - fertility	Does not contain any substances known to be toxic to reproduction.
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.
General information	This product has low toxicity.
Inhalation	Considered to be a low inhalation hazard at normal workplace temperatures.
Ingestion	May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.
Skin contact	Skin irritation should not occur when used as recommended. Prolonged or repeated exposure may cause the following adverse effects: Irritation. Redness. Dryness and/or cracking. Mild dermatitis, allergic skin rash.
Eye contact	Irritating to eyes. May cause serious eye damage. Severe irritation, burning, tearing and blurred vision. Corneal damage.
<u>11.2 Information on other</u> hazards	
11.2.1. Endocrine disrupting properties	This product is not classified as, nor contains substances classed as having endocrine disrupting characteristics at levels >0.1% by weight (according to Regulation (EU) 2018/605).
11.2.2 Other information	None known
Toxicological information on ir	ngredients.
	CITRIC ACID ANHYDROUS
Acute toxicity - o	ral
Acute toxicity ora mg/kg)	<b>al (LD₅o</b> 5,040.0
Species	Mouse
ATE oral (mg/kg)	5,040.0
Acute toxicity - d	

Acute toxicity dermal (LD₅₀ mg/kg)	2,001.0
Species	Rat
ATE dermal (mg/kg)	2,001.0
D	-GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	2,001.0
Species	Rat
ATE oral (mg/kg)	2,001.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	2,001.0
Species	Rabbit
ATE dermal (mg/kg)	2,001.0
Skin sensitisation	
Skin sensitisation	Not sensitising. REACH dossier information.
Germ cell mutagenicity	
Genotoxicity - in vitro	REACH dossier information. Negative.
Genotoxicity - in vivo	REACH dossier information. Negative.
·	REACH dossier information. Negative. 6) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16))
·	
ALKYL (C12-1)	
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD₅o	6) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16))
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg)	6) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16)) 397.5
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg) Species	6) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16)) 397.5 Rat
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg) Species ATE oral (mg/kg)	6) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16)) 397.5 Rat 397.5
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg) Species ATE oral (mg/kg) Acute toxicity - dermal Acute toxicity dermal (LD <sub>50</sub>	6) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16)) 397.5 Rat 397.5
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg) Species ATE oral (mg/kg) Acute toxicity - dermal Acute toxicity dermal (LD <sub>50</sub> mg/kg)	397.5 Rat 397.5 3,412.5
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg) Species ATE oral (mg/kg) Acute toxicity - dermal Acute toxicity dermal (LD <sub>50</sub> mg/kg) Species	397.5 Rat 397.5 3,412.5 Rabbit
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg) Species ATE oral (mg/kg) Acute toxicity - dermal Acute toxicity dermal (LD <sub>50</sub> mg/kg) Species ATE dermal (mg/kg)	397.5 Rat 397.5 3,412.5 Rabbit
ALKYL (C12-10 Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg) Species ATE oral (mg/kg) Acute toxicity - dermal Acute toxicity dermal (LD <sub>50</sub> mg/kg) Species ATE dermal (mg/kg) Skin corrosion/irritation	397.5 Rat 397.5 3,412.5 Rabbit 3,412.5 Corrosive to skin.
ALKYL (C12-14) Acute toxicity - oral Acute toxicity oral (LD <sub>50</sub> mg/kg) Species ATE oral (mg/kg) Acute toxicity - dermal Acute toxicity dermal (LD <sub>50</sub> mg/kg) Species ATE dermal (mg/kg) <u>Skin corrosion/irritation</u> Skin corrosion/irritation	397.5 Rat 397.5 3,412.5 Rabbit 3,412.5 Corrosive to skin.

	Respiratory sensitisation	Not sensitising.
	Skin sensitisation	
	Skin sensitisation	Not sensitising.
	Germ cell mutagenicity	
	Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
	Carcinogenicity	
	Carcinogenicity	Not classified.
	Reproductive toxicity	
	Reproductive toxicity - fertility	Not classified.
	Specific target organ toxici	ity - single exposure
	STOT - single exposure	Not classified. Swallowing concentrated chemical may cause severe internal injury.
	Specific target organ toxici	ity - repeated exposure
	STOT - repeated exposure	• Not classified as a specific target organ toxicant after repeated exposure.
	Aspiration hazard	
	Aspiration hazard	Not classified.
<b>SECTION 1</b>	2: Ecological information	
Ecotoxicity	There a environ	re no data on the ecotoxicity of this product. Not regarded as dangerous for the ment.
12.1. Toxici	ty	
Toxicity		
-	Not con	sidered toxic to fish.
	Not con nformation on ingredients.	sidered toxic to fish.
		sidered toxic to fish. CITRIC ACID ANHYDROUS
	nformation on ingredients.	
	nformation on ingredients. Acute aquatic toxicity	CITRIC ACID ANHYDROUS
	nformation on ingredients. <u>Acute aquatic toxicity</u> Acute toxicity - fish	CITRIC ACID ANHYDROUS LC50, 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe)
	nformation on ingredients. Acute aquatic toxicity Acute toxicity - fish Acute toxicity - aquatic invertebrates	CITRIC ACID ANHYDROUS LC50, 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe)
	nformation on ingredients. Acute aquatic toxicity Acute toxicity - fish Acute toxicity - aquatic invertebrates	CITRIC ACID ANHYDROUS LC50, 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe) EC50, 24 hours: 1535 mg/l, Daphnia magna
	nformation on ingredients. Acute aquatic toxicity Acute toxicity - fish Acute toxicity - aquatic invertebrates	CITRIC ACID ANHYDROUS LC50, 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe) EC50, 24 hours: 1535 mg/l, Daphnia magna
	nformation on ingredients. Acute aquatic toxicity Acute toxicity - fish Acute toxicity - aquatic invertebrates	CITRIC ACID ANHYDROUS LC50, 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe) EC50, 24 hours: 1535 mg/l, Daphnia magna
	Acute aquatic toxicity Acute toxicity - fish Acute toxicity - aquatic invertebrates Acute aquatic toxicity Acute toxicity - fish Acute toxicity - fish Acute toxicity - aquatic	CITRIC ACID ANHYDROUS LC50, 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe) EC50, 24 hours: 1535 mg/l, Daphnia magna D-GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES LC50, 96 hours: 100.81 mg/l, Brachydanio rerio (Zebra Fish)
	nformation on ingredients.         Acute aquatic toxicity         Acute toxicity - fish         Acute toxicity - aquatic         invertebrates         Acute toxicity - fish         Acute aquatic toxicity         Acute toxicity - aquatic         invertebrates         Acute toxicity - fish         Acute toxicity - aquatic         invertebrates         Acute toxicity -	CITRIC ACID ANHYDROUS LC <sub>50</sub> , 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe) EC <sub>50</sub> , 24 hours: 1535 mg/l, Daphnia magna DECUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES LC <sub>50</sub> , 96 hours: 100.81 mg/l, Brachydanio rerio (Zebra Fish) EC <sub>50</sub> , 48 hours: 101 mg/l, Daphnia magna
	Acute aquatic toxicity Acute toxicity - fish Acute toxicity - aquatic invertebrates Acute aquatic toxicity Acute toxicity - fish Acute toxicity - fish Acute toxicity - aquatic invertebrates Acute toxicity - aquatic invertebrates	CITRIC ACID ANHYDROUS LC <sub>50</sub> , 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe) EC <sub>50</sub> , 24 hours: 1535 mg/l, Daphnia magna DECUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES LC <sub>50</sub> , 96 hours: 100.81 mg/l, Brachydanio rerio (Zebra Fish) EC <sub>50</sub> , 48 hours: 101 mg/l, Daphnia magna

#### ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16))

Acute aquatic toxicity	
LE(C)₅₀	$0.01 < L(E)C50 \le 0.1$
M factor (Acute)	10
Acute toxicity - fish	LC₅₀, 96 hours: 0.515 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 0.016 mg/l, Daphnia magna
Acute toxicity - aquatic plants	LC₅₀, : 0.03 mg/l,
Chronic aquatic toxicity	
NOEC	0.001 < NOEC ≤ 0.01
Degradability	Rapidly degradable
M factor (Chronic)	1
Chronic toxicity - fish early life stage	NOEC, : 0.32 mg/l,
Chronic toxicity - aquatic invertebrates	NOEC, : 0.025 mg/l, Daphnia magna NOEC, : 0.009 mg/l, Freshwater algae
12.2. Persistence and degradability	

**Persistence and degradability** The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in The Detergents Regulations (as amended).

#### Ecological information on ingredients.

#### CITRIC ACID ANHYDROUS

Persistence and degradability	The product is biodegradable.	
	D-GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES	
Biodegradation	Water - Degradation 100%: 28 days	
ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16))		
Phototransforma	tion REACH dossier information. Air - Half-life : 0.25 days	
Stability (hydroly	sis) REACH dossier information. - Half-life : 1 year @ 20°C	
Biodegradation	- 63-95%: 28 days	
12.3. Bioaccumulative potential		
Bioaccumulative potential	No data available on bioaccumulation.	
Partition coefficient	Not applicable. Not technically possible for a mixture.	

#### Ecological information on ingredients.

#### CITRIC ACID ANHYDROUS

	Bioaccumulative potential	The product is not bioaccumulating.	
	Partition coefficient	log Pow: -1.72 REACH dossier information.	
	D	-GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES	
	Partition coefficient	log Pow: 1.72 REACH dossier information.	
	ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16))		
	Bioaccumulative potential	Low potential for bioaccumulation.	
	Partition coefficient	log Kow: 2.75	
12.4. Mobilit	y in soil		
Mobility	The proc	luct is water-soluble and may spread in water systems.	
Ecological in	formation on ingredients.		
		CITRIC ACID ANHYDROUS	
	Mobility	Soluble in water.	
	D	-GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES	
	Henry's law constant	0 Pa m³/mol @ 25°C	
	ALKYL (C12-1	6) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16))	
	Henry's law constant	0 Pa m³/mol @ 20°C	
12.5. Result	s of PBT and vPvB assessm	<u>ent</u>	
Results of P assessment	•	duct does not contain any substances classified as PBT or vPvB.	
<u>12.6. Endoc</u> properties	rine disrupting		
Endocrine d properties	· · · · · · · · ·	duct is not classified as, nor contains substances classed as having endocrine g characteristics at levels >0.1% by weight (according to Regulation (EU) 2018/605).	
Ecological ir	formation on ingredients.		
		CITRIC ACID ANHYDROUS	
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current UK criteria.	
	D	-GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES	
	Results of PBT and vPvB assessment	No data available.	
	ALKYL (C12-1	6) DIMETHYLBENZYL AMMONIUM CHLORIDE (ADBAC/BKC (C12-16))	
	Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current UK criteria.	

12.6. Other adverse effects

Other adverse effects	None known.	
Ecological information on ingredients.		
	CITRIC ACID ANHYDROUS	
Other adverse ef	fects Not available.	
	D-GLUCOPYRANOSE, OLIGOMERIC, C8-10 GLYCOSIDES	
Other adverse ef	fects None known.	
SECTION 13: Disposal consid	erations	
13.1. Waste treatment method	ls	
General information	Do not discharge into drains or watercourses or onto the ground.	
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Normal use solutions are expected to be flushed to sewers. Reuse or recycle products wherever possible.	
SECTION 14: Transport inform	nation	
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	<u>e</u>	
Not applicable.		
14.3. Transport hazard class(e	es)	
No transport warning sign requ	uired.	
14.4. Packing group		
Not applicable.		
14.5. Environmental hazards		
Environmentally hazardous substance/marine pollutant No.		
14.6. Special precautions for u	Iser	
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	<ul> <li>The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).</li> <li>EH40/2005 Workplace exposure limits.</li> <li>UK Biocidal Regulations.</li> <li>The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 (SI 2020 No. 1577) (as amended).</li> <li>The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019 No. 696) (as amended).</li> <li>The Detergents Regulations 2010 (SI 2010 No. 740) (as amended). The Detergents (Amendment) (EU Exit) Regulations 2019 (SI 2019 No. 612) (as amended). The Detergents (Safeguarding) (Amendment) (EU Exit) Regulations 2019 (SI 2019 No. 612) (as amended).</li> <li>The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).</li> <li>The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (as amended).</li> <li>The Chemicals (Health and Safety) and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).</li> <li>The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].</li> </ul>
EU legislation	European Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (as amended) European Regulation (EC) No 1907/2006 - Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended) European Regulation (EC) No 648/2004 on detergents (as amended) European Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products (BPR) as amended Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) 1907/2006.
Guidance	Workplace Exposure Limits EH40. ECHA Guidance on the Application of the CLP Criteria. ECHA Guidance on the compilation of safety data sheets. COSHH Essentials. Technical Guidance WM2: Hazardous Waste.

#### 15.2. Chemical safety assessment

No information available.

#### SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	DNEL: Derived No Effect Level. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision. Note: Finished product SDS take their revision history from the parent bulk liquid SDS. The revision data will show that of the parent liquid. Revised formulation.
Revision date	13/07/2023
Revision	8
Supersedes date	21/04/2023
SDS number	20617

Hazard statements in full	H302 Harmful if swallowed.
	H314 Causes severe skin burns and eye damage.
	H318 Causes serious eye damage.
	H319 Causes serious eye irritation.
	H400 Very toxic to aquatic life.
	H410 Very toxic to aquatic life with long lasting effects.

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.