



## Material Safety Data Sheet

EU Regulation: 1907/2006

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFICATION					
PRODUCT NAME	Essential oils - Cinnamon Bark - Etherische olie - Kaneel (schors / bark)				
INCI NAME	CINNAMOMUM ZEYLANICUM BARK OIL				
SYNONYMS & TRADE NAMES	-				
INTERNAL PRODUCT CODE	SQ0150129 - EO054				
CAS-No	84649-98-9	EC No.	283-479-0	EINECS No.	283-479-0
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
COMPANY ADDRESS	SoapQueen vof, Veilingdreef 20 4614RX Bergen op Zoom Nederland				
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
EMERGENCY CONTACTS	+31 (0)164 254900 - Office Hours: 09:00 - 17:00 (weekdays only)				

SECTION 2: HAZARDS IDENTIFICATION	
<b>2.1</b> <b>CLASSIFICATION OF THE SUBSTANCE OR MIXTURE</b>	THE FULL TEXT FOR ALL HAZARD STATEMENTS IS DISPLAYED IN SECTION 16.
<b>CLASSIFICATION (67/548/EEC)</b>	NO ADDITIONAL DATA AVAILABLE.
<b>CLASSIFICATION (EU1272/2008)</b>	ACUTE DERMAL TOXICITY, CATEGORY 4 (ACUTE TOX. 4, H312). SKIN IRRITATION, CATEGORY 2 (SKIN IRRIT. 2, H315). EYE IRRITATION, CATEGORY 2 (EYE IRRIT. 2, H319). SKIN SENSITISATION, CATEGORY 1A (SKIN SENS. 1A, H317). HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD, CATEGORY 3 (AQUATIC CHRONIC 3, H412). THIS MIXTURE DOES NOT PRESENT A PHYSICAL HAZARD. REFER TO THE RECOMMENDATIONS REGARDING THE OTHER PRODUCTS PRESENT ON THE SITE.
<b>2.2</b> <b>LABEL ELEMENTS</b>	LABEL IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.
<b>GHS LABEL</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  GHS07 </div> <div style="text-align: center;">  GHS09 </div> </div>
<b>SIGNAL WORD</b>	DANGER.
<b>CONTAINS</b>	CARYOPHYLLENE, ISOEUGENOL
<b>HAZARDS STATEMENT</b>	H315 CAUSES SKIN IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. H319 CAUSES SERIOUS EYE IRRITATION. H350 MAY CAUSE CANCER. H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS
<b>PRECAUTIONARY STATEMENTS</b>	P280 - WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION  P202 - DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD  P302 + P352 - IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER <sup>[1][2]</sup> <sub>SEP</sub>  P333 + P313 - IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION  P305 + P351 + P338 - IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING <sup>[1][2]</sup> <sub>SEP</sub>  P337 + P313 - IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION <sup>[1][2]</sup> <sub>SEP</sub>  P308 + P313 - IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ATTENTION  P273 - AVOID RELEASE TO THE ENVIRONMENT <sup>[1][2]</sup> <sub>SEP</sub>  P501 - DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL, REGIONAL, NATIONAL, AND INTERNATIONAL REGULATIONS AS APPLICABLE
<b>SUPPLEMENTARY PRECAUTIONARY STATEMENTS</b>	NONE.

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

SECTION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.

2.3  
OTHER HAZARDS

ADVERSE PHYSIO-CHEMICAL PROPERTIES	NO DATA.
ADVERSE EFFECTS ON HUMAN HEALTH	THE MIXTURE DOES NOT CONTAIN SUBSTANCES CLASSIFIED AS 'SUBSTANCES OF VERY HIGH CONCERN' (SVHC) $\geq 0.1\%$ PUBLISHED BY THE EUROPEAN CHEMICALS AGENCY (ECHA) UNDER ARTICLE 57 OF REACH: <a href="http://echa.europa.eu/fr/candidate-list-table">HTTP://ECHA.EUROPA.EU/FR/CANDIDATE-LIST-TABLE</a>
PBT OR VPVB ACCORDING TO ANNEX XIII	THE MIXTURE SATISFIES NEITHER THE PBT NOR THE VPVB CRITERIA FOR MIXTURES IN ACCORDANCE WITH ANNEXE XIII OF THE REACH REGULATIONS EC 1907/2006.

SECTION 3: COMPOSITION OF INGREDIENTS

3.1  
MIXTURES

Chemical Name	EC No.	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Cinnamic aldehyde	Present	104-55-2	70 < 80%	Acute Tox. 5 (H303)(EFA) Acute Tox. 4 (H312)(EFA) Skin Irrit. 2 (H315)(EFA) Eye Irrit. 2 (H319)(EFA) Skin Sens. 1A (H317)(EFA) Aquatic Acute 2 (H401)(EFA)	No data available
Eugenol	Present	97-53-0	10 < 20%	Aquatic Acute 2 (H401) (EFA) Skin	No data available

				Sens. 1 (H317) (EFA) Eye Irrit. 2 (H319) (EFA) Skin Irrit. 3 (H316) (EFA) Acute Tox. 5 (H303)(EFA)	
Linalool	Present	78-70-6	1 < 10%	Aquatic Acute 3 (H402) (EFA) Eye Irrit. 2 (H319) (EFA) Skin Irrit. 2 (H315) (EFA) Acute Tox. 5 (H303)(EFA) Flam. Liq. 4 (H227)(EFA) Skin Sens. 1B (H317) (EFA)	No data available
d-Limonene	Present	5989-27-5	1 < 10%	Flammable Liq. 3 (H226)(EFA) Skin Irrit. 2 (H315)(EFA) Skin Sens. 1B (H317)(EFA) Asp. Tox. 1 (H304)(EFA) Aquatic Acute 1 (H400)(EFA) Aquatic Chronic 1 (H410)(EFA)	No data available
Caryophyllene	Present	87-44-5	0.1 < 1%	Skin Sens. 1B (H317) (EFA) Asp. Tox. 1 (H304) (EFA) Chronic Aquatic 4 (H413) (EFA)	No data available
Benzyl benzoate	Present	120-51-4	0.1 < 1%	Acute Tox. 4 (H302)(EFA) Aquatic Acute 1 (H400) (EFA) Aquatic Chronic 2 (H411) (EFA) Acute Tox. 5 (H313)(EFA)	No data available
Eugenyl acetate	Present	93-28-7	0.1 < 1%	Acute Tox. 4 (H302) (EFA) Acute Aquatic 2 (H401)(EFA)	No data available
Cinnamyl acetate	Present	103-54-8	0.1 < 1%	Acute Tox. 5 (H303) Aquatic Acute 3(H402)	No data available
alpha-Phellandrene	Present	99-83-2	0.1 < 1%	Skin Irrit. 3 (H316) (EFA) Asp. Tox. 1 (H304) (EFA) Flam. Liq. 3 (H226)(EFA)	No data available
Safrole	Present	94-59-7	0.1 < 1%	Acute Tox. 4 (H302)(EFA) Muta. 2 (H341)(EFA) Carc. 1B (H350)(EFA)	No data available
para-Cymene	Present	99-87-6	0.01 < 0.1%	Rep Tox. 2 (H361), Aquatic Acute 2 (H401), Skin Irrit. 3 (H316), Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Acute Tox. 5 (H303),Flam. Liq. 3 (H226)	No data available
Myrcene	Present	123-35-3	0.01 < 0.1%	Eye Irrit. 2 (H319) (EFA) Skin Irrit. 2 (H315) (EFA) Asp. Tox. 1 (H304) (EFA) Flam. Liquid 3 (H226) (EFA) Acute Aquatic 1 (H400) (EFA) Chronic Aquatic 2 (H411) (EFA)	No data available
alpha-Terpineol	Present	98-55-5	0.01 < 0.1%	Aquatic Acute 2 (H401) (EFA) Eye	No data available

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

				Irrit. 2 (H319) (EFA) Skin Irrit. 2 (H315) (EFA) Acute Tox. 5 (H303)(EFA) Flam. Liq. 4 (H227)(EFA)	
Camphene	Present	79-92-5	0.01 < 0.1%	Aquatic Acute 1 (H400) (EFA) Eye Irrit. 2B (H320) (EFA) Aquatic Chronic 1 (H410) (EFA) Flam. Sol 2 (H228) (EFA)	No data available
beta-Pinene	Present	127-91-3	0.01 < 0.1%	Acute Aquatic 1 (H400) (EFA) Chronic Aquatic 1 (H410) (EFA) Skin Sens. 1 (H317) (EFA) Skin Irrit. 2 (H315) (EFA) Asp. Tox. 1 (H304) (EFA) Flam. Liq. 3 (H226)(EFA)	No data available
alpha-Pinene	Present	80-56-8	0.01 < 0.1%	Acute Aquatic 1 (H400) (EFA) Chronic Aquatic 1 (H410) (EFA) Acute Tox. 4 (H302) (EFA) Skin Sens. 1B (H317) (EFA) Skin Irrit. 2 (H315) (EFA) Asp. Tox. 1 (H304) (EFA) Flam. Liq. 3 (H226)(EFA)	No data available
Isoeugenol	Present	97-54-1	0.01 < 0.1%	Aquatic Acute 2 (H401) (EFA) Skin Sens. 1 (H317) (EFA) Eye Irrit. 2 (H319) (EFA) Skin Irrit. 2 (H315) (EFA) Acute Tox. 4 (H302) (EFA) Acute Tox. 4 (H312)(EFA)Acute Tox. 4 (H332)(EFA)STOT SE 3(H335)(EFA)	No data available
Benzaldehyde	Present	100-52-7	0.001 < 0.01%	STOT SE 3(H335) Skin Irrit. 3 (H316) Flam. Liq. 4 (H227) Eye Irrit. 2A(H319)Aquatic Acute 2 (H401) Acute Tox. 5 (H313) Acute Tox. 4 (H302) Acute Tox. 4 (H332)	No data available
Sabinene	Present	3387-41-5	0.001 < 0.01%	Aspiration cat 1 (H304), Flam cat 3 (H226), Skin Irri cat 2 (H315), Skin sensi cat 1B (H317), Acute aquatic cat 1 (H400), Chronic aquatic cat 1 (H410)	No data available
Eucalyptol	Present	470-82-6	0.001 < 0.01%	Skin Irrit. 3 (H316) (EFA) Acute Tox. 5 (H303)(EFA) Flam. Liq. 3 (H226)(EFA) Skin Sens. 1B (H317) (EFA)	No data available
Methyl eugenol	Present	93-15-2	0.001 < 0.01%	Aquatic Acute 2 (H401) (EFA) Carc. 2 (H351) (EFA) Muta.	No data available

				2 (H341) (EFA) Acute Tox. 4 (H302) (EFA)	
Styrene	Present	100-42-5	0.001 < 0.01%	Flam. Liq. 3 (H226) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Repr. 2 (H361) STOT SE 3 (H335) STOT RE 1(H372) Asp. Tox. 1 (H304) Aquatic Acute 2(H401) Aquatic Chronic 3 (H412)	No data available
gamma-Terpinene	Present	99-85-4	0.0001 < 0.001%	Rep 2 (H361), Flam. Liq. 3, Aspir Haz. 1 (H304), Acute Tox 5 (H303), Skin Irrit. 3 (H316)	No data available

## SECTION 4: FIRST AID MEASURES

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

<b>4.1</b> <b>DESCRIPTION OF FIRST AID MEASURES</b>	
<b>GENERAL INFORMATION</b>	ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.
<b>INHALATION</b>	GET MEDICAL ATTENTION IMMEDIATELY. REMOVE FROM EXPOSURE SITE TO FRESH AIR, KEEP AT REST, AND OBTAIN MEDICAL ATTENTION.
<b>INGESTION</b>	GET MEDICAL ATTENTION IMMEDIATELY. IMMEDIATELY CALL THE DOCTOR. RINSE MOUTH WITH WATER AND OBTAIN MEDICAL ATTENTION.
<b>SKIN CONTACT</b>	REMOVE CONTAMINATED CLOTHES. WASH THOROUGHLY WITH SOAP AND WATER. CONTACT PHYSICIAN IF IRRITATION PERSISTS.
<b>EYE CONTACT</b>	FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. CONTACT PHYSICIAN IF SYMPTOMS PERSIST.
<b>4.2</b> MOST IMPORTANT SYMPTOMS & EFFECTS (ACUTE & DELAYED)	OBSERVE RISK OF ASPIRATION IF VOMITING OCCURS.
<b>4.3</b> <b>INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED</b>	TREAT SYMPTOMATICALLY.

## SECTION 5: FIRE FIGHTING MEASURES

<b>5.1</b> <b>EXTINGUISHING MATERIAL</b>	FOAM, CO2, DRY CHEMICAL POWDER.
<b>5.2</b> <b>SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE</b>	BURNING PRODUCES IRRITATING, TOXIC AND OBNOXIOUS FUMES
<b>5.3</b> <b>ADVICE FOR FIRE-FIGHTERS</b>	SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>6.1</b> <b>PERSONAL PRECAUTIONS</b>	ENSURE ADEQUATE VENTILATION OF THE WORKING AREA, EVACUATE PERSONNEL TO SAFE AREA, WEAR SUITABLE PROTECTIVE EQUIPMENT. NO SMOKING, SPARKS, FLAMES OR OTHER SOURCES OF IGNITION NEAR SPILLAGE. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. AVOID INHALATION.
<b>6.2</b> <b>ENVIRONMENTAL PRECAUTIONS</b>	DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES.
<b>6.3</b> <b>METHODS &amp; MATERIAL FOR CONTAINMENT AND CLEANING UP</b>	REMOVE IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. AVOID EXCESSIVE INHALATION OF VAPOURS. CONTAIN SPILLAGE IMMEDIATELY BY USE OF SAND OR INERT POWDER. DISPOSE OF ACCORDING TO LOCAL REGULATIONS. COVER WITH AN INERT, INORGANIC, NON-COMBUSTIBLE ABSORBENT MATERIAL (E.G DRY-LIME, SAND, SODA ASH).
<b>6.4</b> <b>REFERENCES TO OTHER SECTIONS</b>	REFER & CONSIDER SECTION 12.

## SECTION 7: HANDLING & STORAGE

<b>7.1</b> <b>PRECAUTIONS FOR SAFE-HANDLING</b>	HANDLE IN ACCORDANCE WITH GOOD HYGIENE AND SAFETY PRACTICE. KEEP AWAY FROM HEAT, SPARKS, OPEN FLAMES AND HOT SURFACES. - NO SMOKING. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. USE IN ACCORDANCE WITH GOOD MANUFACTURING AND INDUSTRIAL HYGIENE PRACTICES. USE IN AREAS WITH ADEQUATE VENTILATION DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
<b>7.2</b> <b>CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES</b>	STORAGE CLASS: FLAMMABLE LIQUID STORAGE. STORE ONLY IN THE ORIGINAL RECEPTACLE. KEEP CONTAINER TIGHTLY SEALED. KEEP IN COOL, DRY, VENTILATED STORAGE AND CLOSED CONTAINERS. KEEP AWAY FROM HEAT.
<b>7.3</b> <b>SPECIFIC END USE(S)</b>	THE INFORMATION REQUIRED IS CONTAINED IN THIS MATERIAL SAFETY DATA

## SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1

CONTROL PARAMETERS

Chemical Name	European Union	United Kingdom	France	Spain	Germany
d-Limonene 5989-27-5	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	S* TWA: 30 ppm TWA: 168 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 28 mg/m <sup>3</sup> Ceiling / Peak: 20 ppm

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

					Ceiling / Peak: 112 mg/m <sup>3</sup> Skin
alpha-Phellandrene 99-83-2	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	-	-
para-Cymene 99-87-6	-	-	TWA: 150 mg/m <sup>3</sup> TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	-	-
Myrcene 123-35-3	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	-	-
Camphene 79-92-5	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	-	-
beta-Pinene 127-91-3	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 113 mg/m <sup>3</sup>	-
alpha-Pinene 80-56-8	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 113 mg/m <sup>3</sup>	-
Sabinene 3387-41-5	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	-	-
Styrene 100-42-5	-	STEL: 250 ppm STEL: 1080 mg/m <sup>3</sup> TWA: 100 ppm TWA: 430 mg/m <sup>3</sup>	TWA: 23.3 ppm TWA: 100 mg/m <sup>3</sup> TWA: 1000 mg/m <sup>3</sup> STEL: 46.8 mg/m <sup>3</sup> STEL: 200 ppm STEL: 1500 mg/m <sup>3</sup>	STEL: 40 ppm STEL: 172 mg/m <sup>3</sup> TWA: 20 ppm TWA: 86 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 86 mg/m <sup>3</sup> Ceiling / Peak: 40 ppm Ceiling / Peak: 172 mg/m <sup>3</sup> Skin
gamma-Terpinene 99-85-4	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	-	-
<b>Chemical Name</b>	<b>Italy</b>	<b>Portugal</b>	<b>Netherlands</b>	<b>Finland</b>	<b>Denmark</b>
d-Limonene 5989-27-5	-	-	-	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 50 ppm STEL: 280 mg/m <sup>3</sup>	-
para-Cymene 99-87-6	-	-	-	-	TWA: 25 ppm TWA: 135 mg/m <sup>3</sup>
beta-Pinene 127-91-3	-	TWA: 20 ppm	-	-	-
alpha-Pinene 80-56-8	-	TWA: 20 ppm	-	-	-
Benzaldehyde 100-52-7	-	-	-	TWA: 1 ppm TWA: 4.4 mg/m <sup>3</sup> Ceiling: 4 ppm Ceiling: 17.4 mg/m <sup>3</sup>	-
Styrene 100-42-5	-	STEL: 40 ppm TWA: 20 ppm	-	TWA: 20 ppm TWA: 86 mg/m <sup>3</sup> STEL: 100 ppm STEL: 430 mg/m <sup>3</sup>	Ceiling: 25 ppm Ceiling: 105 mg/m <sup>3</sup> Skin
<b>Chemical Name</b>	<b>Austria</b>	<b>Switzerland</b>	<b>Poland</b>	<b>Norway</b>	<b>Ireland</b>
d-Limonene 5989-27-5	-	STEL: 14 ppm STEL: 80 mg/m <sup>3</sup> TWA: 7 ppm TWA: 40 mg/m <sup>3</sup>	-	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>	-
Myrcene 123-35-3	-	-	-	TWA: 40 ppm TWA: 275 mg/m <sup>3</sup> STEL: 60 ppm STEL: 343.75 mg/m <sup>3</sup>	-
Camphene 79-92-5	-	Skin STEL: 40 ppm STEL: 224 mg/m <sup>3</sup> TWA: 20 ppm TWA: 112 mg/m <sup>3</sup>	-	-	-
beta-Pinene 127-91-3	-	Skin STEL: 40 ppm STEL: 224 mg/m <sup>3</sup> TWA: 20 ppm TWA: 112 mg/m <sup>3</sup>	-	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>	-
alpha-Pinene	-	Skin	-	TWA: 25 ppm	-

80-56-8		STEL: 40 ppm STEL: 224 mg/m <sup>3</sup> TWA: 20 ppm TWA: 112 mg/m <sup>3</sup>		TWA: 140 mg/m <sup>3</sup> Skin STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>	
Benzaldehyde 100-52-7	-	-	STEL: 40 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	-	-
Styrene 100-42-5	STEL 80 ppm STEL 340 mg/m <sup>3</sup> TWA: 20 ppm TWA: 85 mg/m <sup>3</sup>	STEL: 40 ppm STEL: 170 mg/m <sup>3</sup> TWA: 20 ppm TWA: 85 mg/m <sup>3</sup>	STEL: 100 mg/m <sup>3</sup> TWA: 50 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 105 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 131.25 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 85 mg/m <sup>3</sup> STEL: 40 ppm STEL: 170 mg/m <sup>3</sup>

## 8.2 EXPOSURE CONTROLS



### EYE PROTECTION

WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION. AVOID CONTACT WITH EYES. WEAR APPROVED SAFETY GOGGLES. (EN166)

### HAND PROTECTION

AVOID CONTACT WITH SKIN. WASH HANDS BEFORE BREAKS AND AT END OF WORK. WEAR PROTECTIVE GLOVES. DIN/EN 374. THE GLOVE MATERIAL HAS TO BE IMPERMEABLE AND RESISTANT TO THE PRODUCT/ THE SUBSTANCE/ THE PREPARATION. PENETRATION TIME OF GLOVE MATERIAL: THE EXACT BREAK THROUGH TIME HAS TO BE FOUND OUT BY THE MANUFACTURER OF

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

	THE PROTECTIVE GLOVES AND HAS TO BE OBSERVED.
<b>RESPIRATORY EQUIPMENT</b>	DO NOT INHALE GASES / FUMES / AEROSOLS. CERTIFIED RESPIRATORY PROTECTIVE DEVICE RECOMMENDED.
<b>HYGIENE MEASURES</b>	GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.
<b>ENGINEERING MEASURES</b>	NONE.
<b>SKIN PROTECTION</b>	WEAR PROTECTIVE CLOTHING TO REDUCE THE RISK OF SKIN AND EYE CONTACT.
<b>PERSONAL PROTECTION</b>	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES. AVOID CONTACT WITH SKIN AND EYES. USE PERSONAL PROTECTION ACCORDING TO DIRECTIVE 89/686/EEC.
<b>OTHER PROTECTION</b>	WEAR SUITABLE PROTECTION TO AVOID CONTACT WITH SKIN AND EYES. DO NOT INHALE VAPOURS.
<b>PROCESS CONDITIONS</b>	ENSURE AREA IS WELL VENTILATED. AVOID VAPOUR INHALATION. SAFETY SHOWER & EYE BATH.
<b>ENVIROMENTAL EXPOSURE CONTROLS</b>	AVOID DISCHARGING INTO DRAINAGE WATER.

## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

### 9.1 PHYSICAL & CHEMICAL PROPERTIES

<b>APPEARANCE</b>	CLEAR LIQUID
<b>COLOUR</b>	YELLOW
<b>ODOUR</b>	SPICY & SWEET, CHARACTERISTIC
<b>FLASH POINT (°C)</b>	100°C.
<b>REFRACTIVE INDEX @ 20 °C</b>	1.565 – 1.600
<b>SOLUBILITY IN WATER @ 20 °C</b>	SOLUBLE IN WATER. SOLUBLE IN OIL.

### 9.2 OTHER INFORMATION

NO DATA.

## SECTION 10: STABILITY & REACTIVITY

<b>10.1 REACTIVITY</b>	NOT APPLICABLE.
<b>10.2 CHEMICAL STABILITY</b>	STABLE UNDER SUGGESTED STORAGE CONDITIONS (<15°C). STABLE UNDER NORMAL CONDITIONS.
<b>10.3 POSSIBILITY OF HAZARDOUS REACTIONS</b>	NONE UNDER NORMAL PROCESSING.
<b>10.4 CONDITIONS TO AVOID</b>	STORAGE AT HIGH TEMPERATURES. DO NOT STORE ABOVE 15°C. AVOID HEAT, FLAMES AND OTHER SOURCES OF IGNITION.
<b>10.5 INCOMPATIBLE MATERIALS</b>	AVOID CONCENTRATED ACIDS, ALKALIS & OXIDISING AGENTS.
<b>10.6 HAZARDOUS DECOMPOSITION PRODUCTS</b>	THIS PRODUCT DOES NOT DECOMPOSE UNDER NORMAL CONDITIONS. UNDER FIRE CONDITIONS THE PRODUCT WILL PRODUCE A MIXTURE OF IRRITATING FUMES & SMOKE & CARBON MONOXIDE.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 TOXICOLOGICAL EFFECTS

*The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.*





ACUTE TOXICITY	Acute toxicity																																																																												
	Product Information																																																																												
	Inhalation Eye Contact Skin contact Ingestion	Avoid breathing vapors or mists. Avoid contact with eyes. Avoid contact with skin. No known hazard by swallowing.																																																																											
	The following values are calculated based on chapter 3.1 of the GHS document																																																																												
	3.93582 % of the mixture consists of ingredient(s) of unknown acute oral toxicity. 19.49572 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity. 97.96802 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas) 97.96802 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor) 97.96802 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)																																																																												
<table><tr><th>Chemical Name</th><th>Oral LD50</th><th>Dermal LD50</th><th>Inhalation LC50</th></tr><tr><td>Cinnamic aldehyde</td><td>2,220 mg/kg</td><td>&gt;2000 mg/kg ( Rabbit )</td><td>68.88 mg/l</td></tr></table>		Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	Cinnamic aldehyde	2,220 mg/kg	>2000 mg/kg ( Rabbit )	68.88 mg/l																																																																				
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50																																																																										
Cinnamic aldehyde	2,220 mg/kg	>2000 mg/kg ( Rabbit )	68.88 mg/l																																																																										
<table><tr><td>Eugenol</td><td>1930 mg/kg ( Rat )</td><td></td><td>2.6 mg/L/4h air (nominal) (Rat, OECD 403)</td></tr><tr><td>Linalool</td><td>= 2790 mg/kg ( Rat )</td><td>= 2000 mg/kg ( Rabbit ) = 5610 mg/kg ( Rat )</td><td></td></tr><tr><td>d-Limonene</td><td>Memo</td><td>&gt; 5 g/kg ( Rabbit )</td><td></td></tr><tr><td>Benzyl benzoate</td><td>&gt;2,000 mg/kg ( Rat )</td><td>4000 mg/kg ( Rabbit )</td><td>&gt;5.57 mg/L (similar materials, 4 hours, Rat)</td></tr><tr><td>Eugenyl acetate</td><td>= 1670 mg/kg ( Rat )</td><td>&gt; 5 g/kg ( Rabbit )</td><td></td></tr><tr><td>alpha-Phellandrene</td><td>= 5700 mg/kg ( Rat )</td><td></td><td></td></tr><tr><td>Safrole</td><td>= 1950 mg/kg ( Rat )</td><td>&gt; 5 g/kg ( Rabbit )</td><td></td></tr><tr><td>para-Cymene</td><td>4,750 mg/kg (Rat)</td><td>&gt;5,000 mg/kg (Rabbit)</td><td>&gt;9.7 mg/L (Rat) 5hr</td></tr><tr><td>Myrcene</td><td>&gt; 5 g/kg ( Rat )</td><td>&gt; 5 g/kg ( Rabbit )</td><td></td></tr><tr><td>alpha-Terpineol</td><td>4,300 mg/kg, &gt;4,760.00 mg/kg (REACH)</td><td>&gt;2,000 mg/kg</td><td>&gt;2,000 mg/kg</td></tr><tr><td>Camphene</td><td>&gt; 5 g/kg ( Rat )</td><td>&gt; 2500 mg/kg ( Rabbit )</td><td>= 17100 mg/m³ ( Rat ) 1 h</td></tr><tr><td>beta-Pinene</td><td>= 4700 mg/kg ( Rat ) &gt; 5000 mg/kg ( Rat )</td><td>&gt; 5000 mg/kg ( Rabbit )</td><td></td></tr><tr><td>alpha-Pinene</td><td>500mg/kg (Rat)</td><td>&gt; 5000 mg/kg ( Rat )</td><td></td></tr><tr><td>Isoeugenol</td><td></td><td>1,912 mg/kg (rabbit)</td><td></td></tr><tr><td>Benzaldehyde</td><td></td><td>&gt; 1250 mg/kg ( Rabbit )</td><td></td></tr><tr><td>Eucalyptol</td><td>= 2480 mg/kg ( Rat )</td><td></td><td></td></tr><tr><td>Methyl eugenol</td><td>= 810 mg/kg ( Rat )</td><td>&gt; 2025 mg/kg ( Rabbit )</td><td></td></tr><tr><td>Styrene</td><td></td><td></td><td>= 11.7 mg/L ( Rat ) 4 h</td></tr><tr><td>gamma-Terpinene</td><td>3,850 mg/kg (Rat)</td><td></td><td></td></tr></table>		Eugenol	1930 mg/kg ( Rat )		2.6 mg/L/4h air (nominal) (Rat, OECD 403)	Linalool	= 2790 mg/kg ( Rat )	= 2000 mg/kg ( Rabbit ) = 5610 mg/kg ( Rat )		d-Limonene	Memo	> 5 g/kg ( Rabbit )		Benzyl benzoate	>2,000 mg/kg ( Rat )	4000 mg/kg ( Rabbit )	>5.57 mg/L (similar materials, 4 hours, Rat)	Eugenyl acetate	= 1670 mg/kg ( Rat )	> 5 g/kg ( Rabbit )		alpha-Phellandrene	= 5700 mg/kg ( Rat )			Safrole	= 1950 mg/kg ( Rat )	> 5 g/kg ( Rabbit )		para-Cymene	4,750 mg/kg (Rat)	>5,000 mg/kg (Rabbit)	>9.7 mg/L (Rat) 5hr	Myrcene	> 5 g/kg ( Rat )	> 5 g/kg ( Rabbit )		alpha-Terpineol	4,300 mg/kg, >4,760.00 mg/kg (REACH)	>2,000 mg/kg	>2,000 mg/kg	Camphene	> 5 g/kg ( Rat )	> 2500 mg/kg ( Rabbit )	= 17100 mg/m³ ( Rat ) 1 h	beta-Pinene	= 4700 mg/kg ( Rat ) > 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )		alpha-Pinene	500mg/kg (Rat)	> 5000 mg/kg ( Rat )		Isoeugenol		1,912 mg/kg (rabbit)		Benzaldehyde		> 1250 mg/kg ( Rabbit )		Eucalyptol	= 2480 mg/kg ( Rat )			Methyl eugenol	= 810 mg/kg ( Rat )	> 2025 mg/kg ( Rabbit )		Styrene			= 11.7 mg/L ( Rat ) 4 h	gamma-Terpinene	3,850 mg/kg (Rat)		
Eugenol	1930 mg/kg ( Rat )		2.6 mg/L/4h air (nominal) (Rat, OECD 403)																																																																										
Linalool	= 2790 mg/kg ( Rat )	= 2000 mg/kg ( Rabbit ) = 5610 mg/kg ( Rat )																																																																											
d-Limonene	Memo	> 5 g/kg ( Rabbit )																																																																											
Benzyl benzoate	>2,000 mg/kg ( Rat )	4000 mg/kg ( Rabbit )	>5.57 mg/L (similar materials, 4 hours, Rat)																																																																										
Eugenyl acetate	= 1670 mg/kg ( Rat )	> 5 g/kg ( Rabbit )																																																																											
alpha-Phellandrene	= 5700 mg/kg ( Rat )																																																																												
Safrole	= 1950 mg/kg ( Rat )	> 5 g/kg ( Rabbit )																																																																											
para-Cymene	4,750 mg/kg (Rat)	>5,000 mg/kg (Rabbit)	>9.7 mg/L (Rat) 5hr																																																																										
Myrcene	> 5 g/kg ( Rat )	> 5 g/kg ( Rabbit )																																																																											
alpha-Terpineol	4,300 mg/kg, >4,760.00 mg/kg (REACH)	>2,000 mg/kg	>2,000 mg/kg																																																																										
Camphene	> 5 g/kg ( Rat )	> 2500 mg/kg ( Rabbit )	= 17100 mg/m³ ( Rat ) 1 h																																																																										
beta-Pinene	= 4700 mg/kg ( Rat ) > 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )																																																																											
alpha-Pinene	500mg/kg (Rat)	> 5000 mg/kg ( Rat )																																																																											
Isoeugenol		1,912 mg/kg (rabbit)																																																																											
Benzaldehyde		> 1250 mg/kg ( Rabbit )																																																																											
Eucalyptol	= 2480 mg/kg ( Rat )																																																																												
Methyl eugenol	= 810 mg/kg ( Rat )	> 2025 mg/kg ( Rabbit )																																																																											
Styrene			= 11.7 mg/L ( Rat ) 4 h																																																																										
gamma-Terpinene	3,850 mg/kg (Rat)																																																																												
SKIN IRRITATION	IRRATATING TO SKIN																																																																												
EYE DAMAGE OR IRRITATION	CAUSES SERIOUS EYE IRRITATION.																																																																												
RESPIRATORY OR SKIN SENSITIVITY	NO DATA.																																																																												
GERM CELL MUTAGENICITY	NO DATA.																																																																												
CARCINOGENICITY	<table><tr><th>Chemical Name</th><th>European Union</th></tr><tr><td>Safrole</td><td>Carc. 1B</td></tr><tr><td>Methyl eugenol</td><td>Carc. 2</td></tr></table>		Chemical Name	European Union	Safrole	Carc. 1B	Methyl eugenol	Carc. 2																																																																					
Chemical Name	European Union																																																																												
Safrole	Carc. 1B																																																																												
Methyl eugenol	Carc. 2																																																																												
REPRODUCTIVE TOXICITY	CONTAINS A KNOWN OR SUSPECTED REPRODUCTIVE TOXIN. GAMMA-TERPINENE. INDIRECT NATURAL STYRENE. PARA-CYMENE.																																																																												
STOT – SINGLE EXPOSURE	NOT CLASSIFIED																																																																												
STOT – REPEATED EXPOSURE	NOT CLASSIFIED																																																																												
ASPIRATION HAZARD	NOT CLASSIFIED																																																																												
OTHER INFORMATION	NOT CLASSIFIED																																																																												
SECTION 12: ECOLOGICAL INFORMATION																																																																													
12.1 TOXICITY	<table><tr><th>Chemical Name</th><th>Crustacea</th><th>Algae/aquatic plants</th><th>Fish</th></tr><tr><td>Cinnamic aldehyde</td><td>48hr EC50 - 3.21 mg/L (Daphnia magna)</td><td>72hr EC50 - 31.6 mg/L (Desmodesmus subspicatus)</td><td>96hr LC50 - 3.9 mg/L (Brachydanio rerio)</td></tr><tr><td>Eugenol</td><td>48hr EC50 - 1.13 mg/L (Daphnia magna) (OECD 202)</td><td>72hr ErC50 - 24 mg/L (Desmodesmus subspicatus) (OECD201)</td><td>96hr LC50 - 13 mg/L (Danio rerio) (OECD 203)</td></tr></table>			Chemical Name	Crustacea	Algae/aquatic plants	Fish	Cinnamic aldehyde	48hr EC50 - 3.21 mg/L (Daphnia magna)	72hr EC50 - 31.6 mg/L (Desmodesmus subspicatus)	96hr LC50 - 3.9 mg/L (Brachydanio rerio)	Eugenol	48hr EC50 - 1.13 mg/L (Daphnia magna) (OECD 202)	72hr ErC50 - 24 mg/L (Desmodesmus subspicatus) (OECD201)	96hr LC50 - 13 mg/L (Danio rerio) (OECD 203)																																																														
Chemical Name	Crustacea	Algae/aquatic plants	Fish																																																																										
Cinnamic aldehyde	48hr EC50 - 3.21 mg/L (Daphnia magna)	72hr EC50 - 31.6 mg/L (Desmodesmus subspicatus)	96hr LC50 - 3.9 mg/L (Brachydanio rerio)																																																																										
Eugenol	48hr EC50 - 1.13 mg/L (Daphnia magna) (OECD 202)	72hr ErC50 - 24 mg/L (Desmodesmus subspicatus) (OECD201)	96hr LC50 - 13 mg/L (Danio rerio) (OECD 203)																																																																										

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

	<table><tr><td>Linalool</td><td>48hr EC50 - 59mg/L (Daphnia magna)</td><td>96hr EC50 - 156.7 mg/L; EC10 or NOEC - 54.3 mg/L (Desmodesmus subspicatus)</td><td>96hr LC50 - 27.8mg/L (Salmo gairdneri)</td></tr><tr><td>d-Limonene</td><td>48hr EC50 - 0.4 mg/L (Daphnia magna)</td><td>96 hr NOEC - 4mg/L (Green algae)</td><td>96hr LC50 - 0.7mg/L (Pimephales promelas)</td></tr><tr><td>Benzyl benzoate</td><td>48 hr EC50 - 3.09 mg/L, Chronic NOEC - 1.73 mg/L (Daphnia magna)</td><td>72hr EC50 - 0.475 mg/L; NOEC - 0.247 mg/L (Pseudokirchneriella subcapitata)</td><td>96 hr LC50 - 2.32 mg/l (Brachydanio rerio)</td></tr><tr><td>para-Cymene</td><td>72hr ErC50 - 4.03 mg/L, NOErC - 1.4 mg/L (Scenedesmus capricornutum)</td><td>48hr EC50 - 100 mg/L</td><td>96hr LC50 - 48 mg/L (Cyprinodon variegatus)</td></tr><tr><td>alpha-Terpineol</td><td>48hr EC50 - 73 mg/l (Daphnia magna)</td><td>72hr EC50 - 68mg/l</td><td>96hr LC50 - 62 to 80 mg/L (Danio rerio)</td></tr><tr><td>Camphene</td><td>48hr EC50/LC50 - 50 mg/L (Daphnia magna)</td><td>72hr EC50 - 30.31 mg/L, EC10 or NOEC - 10 mg/L (Pseudokirchneriella subpicata)</td><td>96hr LC50 - 50 mg/L (Danio rerio)</td></tr><tr><td>alpha-Pinene</td><td>41: 48 h Daphnia magna mg/L LC50</td><td></td><td>0.28: 96 h Pimephales promelas mg/L LC50 static</td></tr><tr><td>Isoeugenol</td><td>48hr EC50 - 4.7 mg/L (QSAR)</td><td>72/96hr EC50 - 13.9 mg/L (QSAR)</td><td>96hr LC50 - 9.3 mg/L (QSAR)</td></tr><tr><td>Benzaldehyde</td><td>50: 24 h Daphnia magna mg/L EC50</td><td></td><td>7.5: 96 h Lepomis macrochirus mg/L LC50 static 6.8 - 8.53: 96 h Pimephales promelas mg/L LC50 flow-through 0.8 - 1.44: 96 h Lepomis macrochirus mg/L LC50 flow-through 10.6 - 11.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 12.69: 96 h Oncorhynchus mykiss mg/L LC50 static</td></tr><tr><td>Eucalyptol</td><td>48hr EC50/LC50 - 100 mg/L (Daphnia magna)</td><td>72hr EC50 - 74 mg/L, EC10 or NOEC - 37 mg/L (Pseudokirchneriella subcapitata)</td><td>96 HR LC50 for freshwater fish - 57 mg/L (Oncorhynchus mykiss)</td></tr><tr><td>Styrene</td><td>3.3 - 7.4: 48 h Daphnia magna mg/L EC50</td><td></td><td>58.75 - 95.32: 96 h Poecilia reticulata mg/L LC50 static 3.24 - 4.99: 96 h Pimephales promelas mg/L LC50 flow-through 19.03 - 33.53: 96 h Lepomis macrochirus mg/L LC50 static 6.75 - 14.5: 96 h Pimephales promelas mg/L LC50 static</td></tr></table>	Linalool	48hr EC50 - 59mg/L (Daphnia magna)	96hr EC50 - 156.7 mg/L; EC10 or NOEC - 54.3 mg/L (Desmodesmus subspicatus)	96hr LC50 - 27.8mg/L (Salmo gairdneri)	d-Limonene	48hr EC50 - 0.4 mg/L (Daphnia magna)	96 hr NOEC - 4mg/L (Green algae)	96hr LC50 - 0.7mg/L (Pimephales promelas)	Benzyl benzoate	48 hr EC50 - 3.09 mg/L, Chronic NOEC - 1.73 mg/L (Daphnia magna)	72hr EC50 - 0.475 mg/L; NOEC - 0.247 mg/L (Pseudokirchneriella subcapitata)	96 hr LC50 - 2.32 mg/l (Brachydanio rerio)	para-Cymene	72hr ErC50 - 4.03 mg/L, NOErC - 1.4 mg/L (Scenedesmus capricornutum)	48hr EC50 - 100 mg/L	96hr LC50 - 48 mg/L (Cyprinodon variegatus)	alpha-Terpineol	48hr EC50 - 73 mg/l (Daphnia magna)	72hr EC50 - 68mg/l	96hr LC50 - 62 to 80 mg/L (Danio rerio)	Camphene	48hr EC50/LC50 - 50 mg/L (Daphnia magna)	72hr EC50 - 30.31 mg/L, EC10 or NOEC - 10 mg/L (Pseudokirchneriella subpicata)	96hr LC50 - 50 mg/L (Danio rerio)	alpha-Pinene	41: 48 h Daphnia magna mg/L LC50		0.28: 96 h Pimephales promelas mg/L LC50 static	Isoeugenol	48hr EC50 - 4.7 mg/L (QSAR)	72/96hr EC50 - 13.9 mg/L (QSAR)	96hr LC50 - 9.3 mg/L (QSAR)	Benzaldehyde	50: 24 h Daphnia magna mg/L EC50		7.5: 96 h Lepomis macrochirus mg/L LC50 static 6.8 - 8.53: 96 h Pimephales promelas mg/L LC50 flow-through 0.8 - 1.44: 96 h Lepomis macrochirus mg/L LC50 flow-through 10.6 - 11.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 12.69: 96 h Oncorhynchus mykiss mg/L LC50 static	Eucalyptol	48hr EC50/LC50 - 100 mg/L (Daphnia magna)	72hr EC50 - 74 mg/L, EC10 or NOEC - 37 mg/L (Pseudokirchneriella subcapitata)	96 HR LC50 for freshwater fish - 57 mg/L (Oncorhynchus mykiss)	Styrene	3.3 - 7.4: 48 h Daphnia magna mg/L EC50		58.75 - 95.32: 96 h Poecilia reticulata mg/L LC50 static 3.24 - 4.99: 96 h Pimephales promelas mg/L LC50 flow-through 19.03 - 33.53: 96 h Lepomis macrochirus mg/L LC50 static 6.75 - 14.5: 96 h Pimephales promelas mg/L LC50 static	
Linalool	48hr EC50 - 59mg/L (Daphnia magna)	96hr EC50 - 156.7 mg/L; EC10 or NOEC - 54.3 mg/L (Desmodesmus subspicatus)	96hr LC50 - 27.8mg/L (Salmo gairdneri)																																											
d-Limonene	48hr EC50 - 0.4 mg/L (Daphnia magna)	96 hr NOEC - 4mg/L (Green algae)	96hr LC50 - 0.7mg/L (Pimephales promelas)																																											
Benzyl benzoate	48 hr EC50 - 3.09 mg/L, Chronic NOEC - 1.73 mg/L (Daphnia magna)	72hr EC50 - 0.475 mg/L; NOEC - 0.247 mg/L (Pseudokirchneriella subcapitata)	96 hr LC50 - 2.32 mg/l (Brachydanio rerio)																																											
para-Cymene	72hr ErC50 - 4.03 mg/L, NOErC - 1.4 mg/L (Scenedesmus capricornutum)	48hr EC50 - 100 mg/L	96hr LC50 - 48 mg/L (Cyprinodon variegatus)																																											
alpha-Terpineol	48hr EC50 - 73 mg/l (Daphnia magna)	72hr EC50 - 68mg/l	96hr LC50 - 62 to 80 mg/L (Danio rerio)																																											
Camphene	48hr EC50/LC50 - 50 mg/L (Daphnia magna)	72hr EC50 - 30.31 mg/L, EC10 or NOEC - 10 mg/L (Pseudokirchneriella subpicata)	96hr LC50 - 50 mg/L (Danio rerio)																																											
alpha-Pinene	41: 48 h Daphnia magna mg/L LC50		0.28: 96 h Pimephales promelas mg/L LC50 static																																											
Isoeugenol	48hr EC50 - 4.7 mg/L (QSAR)	72/96hr EC50 - 13.9 mg/L (QSAR)	96hr LC50 - 9.3 mg/L (QSAR)																																											
Benzaldehyde	50: 24 h Daphnia magna mg/L EC50		7.5: 96 h Lepomis macrochirus mg/L LC50 static 6.8 - 8.53: 96 h Pimephales promelas mg/L LC50 flow-through 0.8 - 1.44: 96 h Lepomis macrochirus mg/L LC50 flow-through 10.6 - 11.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 12.69: 96 h Oncorhynchus mykiss mg/L LC50 static																																											
Eucalyptol	48hr EC50/LC50 - 100 mg/L (Daphnia magna)	72hr EC50 - 74 mg/L, EC10 or NOEC - 37 mg/L (Pseudokirchneriella subcapitata)	96 HR LC50 for freshwater fish - 57 mg/L (Oncorhynchus mykiss)																																											
Styrene	3.3 - 7.4: 48 h Daphnia magna mg/L EC50		58.75 - 95.32: 96 h Poecilia reticulata mg/L LC50 static 3.24 - 4.99: 96 h Pimephales promelas mg/L LC50 flow-through 19.03 - 33.53: 96 h Lepomis macrochirus mg/L LC50 static 6.75 - 14.5: 96 h Pimephales promelas mg/L LC50 static																																											
12.2 PERSISTENCE & DEGRADABILITY	NO DATA.																																													
12.3 BIO- ACCUMULATIVE POTENTIAL	NO DATA.																																													
12.4 MOBILITY IN SOIL	NO DATA																																													
12.5 RESULTS OF PBT & VPVB ASSESSMENT	NO DATA.																																													
12.6 OTHER ADVERSE EFFECTS	<table><tr><td></td><td>Candidate List</td><td>Evaluated Substances</td><td></td></tr><tr><td>Styrene</td><td>Group I Chemical</td><td>High Exposure Concern</td><td>Industrial chemical</td></tr></table>				Candidate List	Evaluated Substances		Styrene	Group I Chemical	High Exposure Concern	Industrial chemical																																			
	Candidate List	Evaluated Substances																																												
Styrene	Group I Chemical	High Exposure Concern	Industrial chemical																																											
SECTION 13: DISPOSAL INFORMATION																																														
13.1 WASTE TREATMENT METHODS	ALWAYS RECOVER SPILLED PRODUCT. DISCARD WASTE MATERIAL WITH AUTHORIZED WASTE MANAGEMENT SERVICES. ACT IN ACCORDANCE WITH LOCAL & NATIONAL WASTE REGULATIONS.																																													

SECTION 14: TRANSPORT INFORMATION	
14.1 TRANSPORT INFORMATION	
UN NUMBER	3082
14.2 UN SHIPPING NAME	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. <sup>[1][2]</sup>
14.3 TRANSPORT HAZARD CLASS(ES)	ADR/RID/ADN CLASS: 9: IMDG CLASS: 9 ICAO CLASS/DIVISION: 9  TRANSPORT LABELS

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

	
<b>14.4</b> <b>PACKING GROUP</b>	III
<b>14.5</b> <b>ENVIROMENTAL HAZARDS</b>	
<b>14.6</b> <b>SPECIAL PRECAUTIONS FOR USER</b>	<p><b>OVERLAND TRANSPORT</b>  CLASSIFICATION CODE (ADR) M6  SPECIAL PROVISIONS (ADR) 274, 335, 375, 601  LIMITED QUANTITIES (ADR) 5L  EXCEPTED QUANTITIES (ADR) E1  PACKING INSTRUCTIONS (ADR) P001, IBC03, LP01, R001  SPECIAL PACKING PROVISIONS (ADR) PP1  MIXED PACKING PROVISIONS (ADR) MP19  PORTABLE TANK AND BULK CONTAINER INSTRUCTIONS (ADR) T4  PORTABLE TANK AND BULK CONTAINER SPECIAL PROVISIONS (ADR) TP1, TP29  TANK CODE (ADR) LGBV  VEHICLE FOR TANK CARRIAGE AT  TRANSPORT CATEGORY (ADR) 3  SPECIAL PROVISIONS FOR CARRIAGE - PACKAGES (ADR) V12  SPECIAL PROVISIONS FOR CARRIAGE - LOADING, UNLOADING AND HANDLING (ADR) CV13  HAZARD IDENTIFICATION NUMBER (KEMLER NO.) 90  ORANGE PLATES :</p> <div data-bbox="865 1085 994 1181" data-label="Image"></div> <p>TUNNEL RESTRICTION CODE (ADR) - EAC CODE 3Z</p> <p><b>TRANSPORT BY SEA</b>  SPECIAL PROVISIONS (IMDG) 274, 335, 969  LIMITED QUANTITIES (IMDG) 5 L  EXCEPTED QUANTITIES (IMDG) E1  PACKING INSTRUCTIONS (IMDG) LP01, P001  SPECIAL PACKING PROVISIONS (IMDG) PP1  IBC PACKING INSTRUCTIONS (IMDG) IBC03  TANK INSTRUCTIONS (IMDG) T4  TANK SPECIAL PROVISIONS (IMDG) TP2, TP29  EMS-NO. (FIRE) F-A  EMS-NO. (SPILLAGE) S-F  STOWAGE CATEGORY (IMDG) A</p> <p><b>AIR TRANSPORT</b>  PCA EXCEPTED QUANTITIES (IATA) E1  PCA LIMITED QUANTITIES (IATA) Y964  PCA LIMITED QUANTITY MAX NET QUANTITY (IATA) 30KG  PCA PACKING INSTRUCTIONS (IATA) 964  PCA MAX NET QUANTITY (IATA) 450L  CAO PACKING INSTRUCTIONS (IATA) 964  CAO MAX NET QUANTITY (IATA) 450L  SPECIAL PROVISIONS (IATA) A97, A158, A197  ERG CODE (IATA) 9L</p> <p><b>INLAND WATERWAY TRANSPORT</b>  CLASSIFICATION CODE (ADN) M6  SPECIAL PROVISIONS (ADN) 274, 335, 375, 601  LIMITED QUANTITIES (ADN) 5 L</p>

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

	<p>EXCEPTED QUANTITIES (ADN) E1 EQUIPMENT REQUIRED (ADN) PP NUMBER OF BLUE CONES/LIGHTS (ADN) 0</p> <p><b>RAIL TRANSPORT</b> CLASSIFICATION CODE (RID) M6 SPECIAL PROVISIONS (RID) 274, 335, 375, 601 LIMITED QUANTITIES (RID) 5L EXCEPTED QUANTITIES (RID) E1 PACKING INSTRUCTIONS (RID) P001, IBC03, LP01, R001 SPECIAL PACKING PROVISIONS (RID) PP1 MIXED PACKING PROVISIONS (RID) MP19 PORTABLE TANK AND BULK CONTAINER INSTRUCTIONS (RID) T4 PORTABLE TANK AND BULK CONTAINER SPECIAL PROVISIONS (RID) TP1, TP29 TANK CODES FOR RID TANKS (RID) LGBV TRANSPORT CATEGORY (RID) 3 SPECIAL PROVISIONS FOR CARRIAGE – PACKAGES (RID) W12 SPECIAL PROVISIONS FOR CARRIAGE - LOADING, UNLOADING AND HANDLING (RID) CW13, CW31 COLIS EXPRESS (EXPRESS PARCELS) (RID) CE8 HAZARD IDENTIFICATION NUMBER (RID) 90</p>
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	No DATA
<b>SECTION 15: REGULATORY INFORMATION</b>	
15.1 PRODUCT SPECIFIC SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS & LEGISLATION	<p><u>STATUTORY INSTRUMENTS</u> THE CHEMICALS (HAZARD INFORMATION AND PACKAGING FOR SUPPLY) REGULATIONS 2009 (S.I 2009 No. 716). <u>APPROVED CODE OF PRACTISE</u> CLASSIFICATION AND LABELLING OF SUBSTANCES AND PREPARATIONS DANGEROUS FOR SUPPLY. SAFETY DATA SHEETS FOR SUBSTANCES AND PREPARATIONS. <u>GUIDANCE NOTES</u> CHIP FOR EVERYONE HSG(108). WORKPLACE EXPOSURE LIMITS EH40 <u>EU LEGISLATION</u> 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), ESTABLISHING A EUROPEAN CHEMICALS AGENCY, AMENDING DIRECTIVE 1999/45/EC AND REPEALING COUNCIL REGULATION (EEC) No 793/93 AND COMMISSION REGULATION (EC) No 1488/94 AS WELL AS COUNCIL DIRECTIVE 76/769/EEC AND COMMISSION DIRECTIVES 91/155/EEC, 93/67/EEC, 93/105/EC AND 2000/21/EC, INCLUDING AMENDMENTS.</p> <p>NATIONAL REGULATIONS <b>GERMANY</b> EMPLOYMENT RESTRICTIONS: OBSERVE RESTRICTIONS ACCORDING ACT ON THE PROTECTION OF WORKING MOTHERS (MuSchG) OBSERVE RESTRICTIONS ACCORDING ACT ON THE PROTECTION OF YOUNG PEOPLE IN EMPLOYMENT (JArbSchG) WATER HAZARD CLASS (WGK): NOT CLASSIFIED ACCORDING TO REGULATION GOVERNING SYSTEMS FOR HANDLING SUBSTANCES HAZARDOUS TO WATERS (AWSV) HAZARDOUS INCIDENT ORDINANCE (12. BImSchV): IS NOT SUBJECT OF THE HAZARDOUS INCIDENT ORDINANCE (12. BImSchV) <b>NETHERLANDS</b> SZW-LIJST VAN KANKERVERWEKKENDE STOFFEN: NONE OF THE COMPONENTS ARE LISTED SZW-LIJST VAN MUTAGENE STOFFEN: NONE OF THE COMPONENTS ARE LISTED NIET-LIMITATIEVE LIJST VAN VOOR DE VOORTPLANTING GIFTIGE STOFFEN – BORSTVOEDING: NONE OF THE COMPONENTS ARE LISTED NIET-LIMITATIEVE LIJST VAN VOOR DE VOORTPLANTING GIFTIGE STOFFEN – VRUCHTBAARHEID: NONE OF THE COMPONENTS ARE LISTED NIET-LIMITATIEVE LIJST VAN VOOR DE VOORTPLANTING GIFTIGE STOFFEN – ONTWIKKELING: NONE OF THE COMPONENTS ARE LISTED <b>DENMARK</b> CLASS FOR FIRE HAZARD: CLASS III-1 STORE UNIT: 50 LITER CLASSIFICATION REMARKS: FLAMMABLE ACCORDING TO THE DANISH MINISTRY OF JUSTICE; EMERGENCY</p>

	MANAGEMENT GUIDELINES FOR THE STORAGE OF FLAMMABLE LIQUIDS MUST BE FOLLOWED DANISH NATIONAL REGULATIONS: YOUNG PEOPLE BELOW THE AGE OF 18 YEARS ARE NOT ALLOWED TO USE THE PRODUCT PREGNANT / BREASTFEEDING WOMEN WORKING WITH THE PRODUCT MUST NOT BE IN DIRECT CONTACT
<b>15.2</b> <b>CHEMICAL SAFETY ASSESSMENT</b>	AN ASSESSMENT HAS NOT BEEN EXECUTED

SECTION 16: OTHER INFORMATION	
HAZARD AND/ OR PRECAUTIONARY STATEMENTS IN FULL	<p>H226 - FLAMMABLE LIQUID AND VAPOR</p> <p>H227 - COMBUSTIBLE LIQUID<sup>[1][2]</sup><sub>SEP</sub> H228 - FLAMMABLE SOLID<sup>[1][2]</sup><sub>SEP</sub></p> <p>H302 - HARMFUL IF SWALLOWED</p> <p>H303 - MAY BE HARMFUL IF SWALLOWED<sup>[1][2]</sup><sub>SEP</sub></p> <p>H304 - MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS</p> <p>H312 - HARMFUL IN CONTACT WITH SKIN<sup>[1][2]</sup><sub>SEP</sub></p> <p>H313 - MAY BE HARMFUL IN CONTACT WITH SKIN<sup>[1][2]</sup><sub>SEP</sub></p> <p>H315 - CAUSES SKIN IRRITATION<sup>[1][2]</sup><sub>SEP</sub></p> <p>H316 - CAUSES MILD SKIN IRRITATION<sup>[1][2]</sup><sub>SEP</sub></p> <p>H317 - MAY CAUSE AN ALLERGIC SKIN REACTION<sup>[1][2]</sup><sub>SEP</sub></p> <p>H319 - CAUSES SERIOUS EYE IRRITATION<sup>[1][2]</sup><sub>SEP</sub></p> <p>H320 - CAUSES EYE IRRITATION<sup>[1][2]</sup><sub>SEP</sub></p> <p>H332 - HARMFUL IF INHALED<sup>[1][2]</sup><sub>SEP</sub></p> <p>H335 - MAY CAUSE RESPIRATORY IRRITATION<sup>[1][2]</sup><sub>SEP</sub></p> <p>H341 - SUSPECTED OF CAUSING GENETIC DEFECTS<sup>[1][2]</sup><sub>SEP</sub></p> <p>H350 - MAY CAUSE CANCER<sup>[1][2]</sup><sub>SEP</sub></p> <p>H361 - SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD</p> <p>H400 - VERY TOXIC TO AQUATIC LIFE<sup>[1][2]</sup><sub>SEP</sub></p> <p>H401 - TOXIC TO AQUATIC LIFE<sup>[1][2]</sup><sub>SEP</sub></p> <p>H402 - HARMFUL TO AQUATIC LIFE<sup>[1][2]</sup><sub>SEP</sub></p> <p>H410 - VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS</p>

*The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.*

	H411 - TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS <sup>111</sup> <sub>SEP</sub>  H413 - MAY CAUSE LONG LASTING HARMFUL EFFECTS TO AQUATIC LIFE
TRAINING INSTRUCTIONS: REFER TO POSSIBLE HAZARD BEFORE USE OF THIS PRODUCT.	
ABBREVIATIONS & ACRONYMS:	
MSDS	MATERIAL SAFETY DATA SHEET.
INCI	INTERNATIONAL NOMENCLATURE OF COSMETIC INGREDIENTS.
CAS	CHEMICAL ABSTRACT SERVICE.
IMDG	INTERNATIONAL MARITIME CODE FOR DANGEROUS GOODS.
ADR	ACCORD EUROPEAN SUR LE TRANSPORT DES MARCHANDISES DANGEREUSES PAR ROUTE (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD).
RID	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY RAIL.
ICAO	INTERNATIONAL CIVIL AVIATION ORGANIZATION.
ADN	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS.
GHS	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION & LABELLING OF CHEMICALS.
TREM CARD	TRANSPORT EMERGENCY CARD.
STOT	SPECIFIC TARGET ORGAN TOXICITY.

## DOCUMENTATION REVISION

DATE	CHANGE DESCRIPTION
26 <sup>TH</sup> OCTOBER 2020	DATA LAUNCH

*The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with SoapQueen regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.*