

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

### 1.1. Product identifier

Product Description: Bright Brushing Gold  
Cat No. : 12943

Unique Formula Identifier (UFI) 34TH-06TS-JX02-XYRH

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.  
Uses advised against No Information available

### 1.3. Details of the supplier of the safety data sheet

Company  
Avocado Research Chemicals Ltd.  
(Part of Thermo Fisher Scientific)  
Shore Road, Heysham  
Lancashire, LA3 2XY,  
United Kingdom  
Office Tel: +44 (0) 1524 850506  
Office Fax: +44 (0) 1524 850608

E-mail address begel.sdsdesk@thermofisher.com

### 1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

Poison Centre - Emergency information services  
**Ireland** : National Poisons Information Centre (NPIC) -  
**01 809 2166** (8am-10pm, 7 days a week)  
**Malta** : +356 2395 2000  
**Cyprus** : +357 2240 5611

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

#### Physical hazards

Flammable liquids

Category 3 (H226)

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## Health hazards

Aspiration Toxicity  
Skin Corrosion/Irritation  
Skin Sensitization  
Specific target organ toxicity - (single exposure)

Category 1 (H304)  
Category 2 (H315)  
Category 1 (H317)  
Category 2 (H371)

## Environmental hazards

Chronic aquatic toxicity

Category 2 (H411)

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

H226 - Flammable liquid and vapor  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H371 - May cause damage to organs  
H411 - Toxic to aquatic life with long lasting effects

## Precautionary Statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
P331 - Do NOT induce vomiting  
P405 - Store locked up  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves/protective clothing  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
P362 + P364 - Take off contaminated clothing and wash it before reuse  
P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor

## 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

## 3.2. Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - According to
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				GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Eucalyptus globulus, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates,	84625-32-1	EEC No. 283-406-2	37.5	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)
Proprietary resins/waxes	N/A		21.25	-
Proprietary organo-gold compound	N/A		8.0	-
Linalool (ex bois de rose, synthetic)	78-70-6	EEC No. 201-134-4	7.5	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319)
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc.	84961-50-2	EEC No. 284-638-7	7.5	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Irrit. 2 (H315)
.alpha.-Pinene	80-56-8	EEC No. 201-291-9	7.5	Flam. Liq. 3 (H226) Acute Tox. 4 (H302) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
o-Dichlorobenzene	95-50-1	EEC No. 202-425-9	2.5	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Turpentine	8006-64-2	EEC No. 232-350-7	2.5	Flam. Liq. 3 (H226) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)
Rosemary, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, e	84604-14-8	EEC No. 283-291-9	2.5	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) Asp. Tox. 1 (H304) STOT SE 2 (H371)
Camphor	76-22-2	EEC No. 200-945-0	2.5	Flam. Sol. 2 (H228) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H332) STOT SE 2 (H371)
Xylenes (o-, m-, p- isomers)	1330-20-7	EEC No. 215-535-7	0.25	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 2 (H373) Aquatic Chronic 3 (H412)
Isophorone	78-59-1	EEC No. 201-126-0	0.25	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Eye Irrit. 2 (H319) Carc. 2 (H351) STOT SE 3 (H335)
Benzene, 1-methoxy-4-(1-propenyl)-	104-46-1	EEC No. 203-205-5	0.25	Skin Sens. 1 (H317)

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Component	Specific concentration limits (SCL's)	M-Factor	Component notes
.alpha.-Pinene	-	1	-
o-Dichlorobenzene	-	1	-
Isophorone	STOT SE 3 (H335) :: C>=10%	-	-

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>General Advice</b>	If symptoms persist, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting occurs naturally, have victim lean forward.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. Risk of serious damage to the lungs (by aspiration).
<b>Self-Protection of the First Aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

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

Difficulty in breathing. May cause allergic skin reaction. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

### 4.3. Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician</b>	Treat symptomatically.
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## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Dry sand. Carbon dioxide (CO<sub>2</sub>). Powder. Do not use water or foam. Water mist may be used to cool closed containers.

#### Extinguishing media which must not be used for safety reasons

No information available.

### 5.2. Special hazards arising from the substance or mixture

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride, Gold oxide.

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## 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.

### 6.2. Environmental precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks and flame.

**Technical Rules for Hazardous Substances (TRGS) 510**      Class 3  
**Storage Class (LGK) (Germany)**

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### **Exposure limits**

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005

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Work Exposure Limits, Fourth edition. Published 2020. IRE - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
o-Dichlorobenzene	STEL: 50 ppm 15 min STEL: 306 mg/m <sup>3</sup> 15 min TWA: 25 ppm 8 hr TWA: 153 mg/m <sup>3</sup> 8 hr Skin	TWA: 20 ppm (8h) TWA: 122 mg/m <sup>3</sup> (8h) STEL: 50 ppm (15min) STEL: 306 mg/m <sup>3</sup> (15min) Skin	TWA: 20 ppm 8 hr. TWA: 122 mg/m <sup>3</sup> 8 hr. STEL: 50 ppm 15 min STEL: 306 mg/m <sup>3</sup> 15 min Skin
Turpentine	STEL: 150 ppm 15 min STEL: 850 mg/m <sup>3</sup> 15 min TWA: 100 ppm 8 hr TWA: 566 mg/m <sup>3</sup> 8 hr		TWA: 20 ppm 8 hr. TWA: 112 mg/m <sup>3</sup> 8 hr. STEL: 150 ppm 15 min STEL: 840 mg/m <sup>3</sup> 15 min
Camphor	STEL: 3 ppm 15 min STEL: 19 mg/m <sup>3</sup> 15 min TWA: 2 ppm 8 hr TWA: 13 mg/m <sup>3</sup> 8 hr		TWA: 2 ppm 8 hr. TWA: 12 mg/m <sup>3</sup> 8 hr. STEL: 3 ppm 15 min STEL: 18 mg/m <sup>3</sup> 15 min
Xylenes (o-, m-, p- isomers)	STEL: 100 ppm 15 min STEL: 441 mg/m <sup>3</sup> 15 min TWA: 50 ppm 8 hr TWA: 220 mg/m <sup>3</sup> 8 hr Skin	TWA: 50 ppm (8h) TWA: 221 mg/m <sup>3</sup> (8h) STEL: 100 ppm (15min) STEL: 442 mg/m <sup>3</sup> (15min) Skin	TWA: 50 ppm 8 hr. TWA: 221 mg/m <sup>3</sup> 8 hr. STEL: 100 ppm 15 min STEL: 442 mg/m <sup>3</sup> 15 min Skin
Isophorone	STEL: 5 ppm 15 min STEL: 29 mg/m <sup>3</sup> 15 min		STEL: 5 ppm 15 min STEL: 25 mg/m <sup>3</sup> 15 min

## Biological limit values

List source(s): **UK** - Biological Monitoring Guidance Values provided by the UK's Health and Safety Executive (HSE) Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended) and EH40/2005.

Component	United Kingdom	European Union
Xylenes (o-, m-, p- isomers)	Methyl hippuric acid: 650 mmol/mol creatinine urine post shift	

## Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Linalool (ex bois de rose, synthetic) 78-70-6 ( 7.5 )	DNEL = 3mg/cm2	DNEL = 5mg/kg bw/day	DNEL = 3mg/cm2	DNEL = 2.5mg/kg bw/day
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc. 84961-50-2 ( 7.5 )	DNEL = 86.25mg/cm2	DNEL = 5mg/kg bw/day	DNEL = 21.56mg/cm2	DNEL = 1.25mg/kg bw/day
.alpha.-Pinene 80-56-8 ( 7.5 )				DNEL = 0.542mg/kg bw/day
o-Dichlorobenzene 95-50-1 ( 2.5 )		DNEL = 6mg/kg bw/day		DNEL = 1.2mg/kg bw/day
Camphor 76-22-2 ( 2.5 )				DNEL = 10mg/kg bw/day
Xylenes (o-, m-, p- isomers) 1330-20-7 ( 0.25 )				DNEL = 212mg/kg bw/day
Isophorone 78-59-1 ( 0.25 )		DNEL = 41mg/kg bw/day		DNEL = 20.5mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Linalool (ex bois de rose, synthetic)		DNEL = 16.5mg/m <sup>3</sup>		DNEL = 2.8mg/m <sup>3</sup>

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78-70-6 ( 7.5 )				
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc. 84961-50-2 ( 7.5 )	DNEL = 44.08mg/m <sup>3</sup>	DNEL = 17.63mg/m <sup>3</sup>	DNEL = 11.02mg/m <sup>3</sup>	DNEL = 4.41mg/m <sup>3</sup>
.alpha.-Pinene 80-56-8 ( 7.5 )				DNEL = 3.8mg/m <sup>3</sup>
o-Dichlorobenzene 95-50-1 ( 2.5 )		DNEL = 21mg/m <sup>3</sup>		DNEL = 4.2mg/m <sup>3</sup>
Camphor 76-22-2 ( 2.5 )				DNEL = 17.6316mg/m <sup>3</sup>
Xylenes (o-, m-, p- isomers) 1330-20-7 ( 0.25 )	DNEL = 442mg/m <sup>3</sup>	DNEL = 442mg/m <sup>3</sup>	DNEL = 221mg/m <sup>3</sup>	DNEL = 221mg/m <sup>3</sup>
Isophorone 78-59-1 ( 0.25 )	DNEL = 22mg/m <sup>3</sup>	DNEL = 22mg/m <sup>3</sup>	DNEL = 11mg/m <sup>3</sup>	DNEL = 11mg/m <sup>3</sup>

## Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment	Water Intermittent	Microorganisms in sewage treatment	Soil (Agriculture)
Linalool (ex bois de rose, synthetic) 78-70-6 ( 7.5 )	PNEC = 0.2mg/L	PNEC = 2.22mg/kg sediment dw	PNEC = 2mg/L	PNEC = 10mg/L	PNEC = 0.327mg/kg soil dw
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc. 84961-50-2 ( 7.5 )	PNEC = 1.9µg/L	PNEC = 37.1µg/kg sediment dw	PNEC = 19µg/L	PNEC = 10mg/L	PNEC = 6.29µg/kg soil dw
.alpha.-Pinene 80-56-8 ( 7.5 )	PNEC = 0.606µg/L	PNEC = 157µg/kg sediment dw	PNEC = 3.03µg/L	PNEC = 0.2mg/L	PNEC = 31.7µg/kg soil dw
o-Dichlorobenzene 95-50-1 ( 2.5 )	PNEC = 0.0037mg/L	PNEC = 0.177mg/kg sediment dw		PNEC = 4.7mg/L	PNEC = 0.0333mg/kg soil dw
Camphor 76-22-2 ( 2.5 )	PNEC = 1.71µg/L	PNEC = 0.139mg/kg sediment dw	PNEC = 17.1µg/L	PNEC = 1mg/L	PNEC = 0.01326mg/kg soil dw
Xylenes (o-, m-, p- isomers) 1330-20-7 ( 0.25 )	PNEC = 0.327mg/L	PNEC = 12.46mg/kg sediment dw	PNEC = 0.327mg/L	PNEC = 6.58mg/L	PNEC = 2.31mg/kg soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Linalool (ex bois de rose, synthetic) 78-70-6 ( 7.5 )	PNEC = 0.02mg/L	PNEC = 0.222mg/kg sediment dw		PNEC = 7.8mg/kg food	
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc. 84961-50-2 ( 7.5 )	PNEC = 0.19µg/L	PNEC = 3.71µg/kg sediment dw	PNEC = 1.9µg/L		

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.alpha.-Pinene 80-56-8 ( 7.5 )	PNEC = 0.0606µg/L	PNEC = 15.7µg/kg sediment dw	PNEC = 0.303µg/L	PNEC = 8.76mg/kg food	
o-Dichlorobenzene 95-50-1 ( 2.5 )	PNEC = 0.00037mg/L	PNEC = 0.0177mg/kg sediment dw		PNEC = 5.56mg/kg food	
Camphor 76-22-2 ( 2.5 )	PNEC = 0.171µg/L	PNEC = 0.0174mg/kg sediment dw	PNEC = 1.71µg/L		
Xylenes (o-, m-, p- isomers) 1330-20-7 ( 0.25 )	PNEC = 0.327mg/L	PNEC = 12.46mg/kg sediment dw			

## 8.2. Exposure controls

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

#### Eye Protection

Wear safety glasses with side shields (or goggles) (European standard - EN 166)

#### Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber	See manufacturers recommendations	-	EN 374	(minimum requirement)

#### Skin and body protection

Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

#### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

#### Large scale/emergency use

In case of insufficient ventilation, wear suitable respiratory equipment  
**Recommended Filter type:** Organic gases and vapours filter

#### Small scale/Laboratory use

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. When RPE is used a face piece Fit Test should be conducted

#### Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### Physical State

Liquid

#### Appearance

Red brown

#### Odor

Pleasant

#### Odor Threshold

No data available



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<b>Melting Point/Range</b>	No data available	
<b>Softening Point</b>	No data available	
<b>Boiling Point/Range</b>	156 °C / 312.8 °F	
<b>Flammability (liquid)</b>	Flammable	On basis of test data
<b>Flammability (solid,gas)</b>	Not applicable	Liquid
<b>Explosion Limits</b>	No data available	
<b>Flash Point</b>	33 °C / 91.4 °F	<b>Method -</b> No information available
<b>Autoignition Temperature</b>	No data available	
<b>Decomposition Temperature</b>	No data available	
<b>pH</b>	No information available	
<b>Viscosity</b>	No data available	
<b>Water Solubility</b>	Immiscible	
<b>Solubility in other solvents</b>	No information available	
<b>Partition Coefficient (n-octanol/water)</b>		
<b>Component</b>	<b>log Pow</b>	
Linalool (ex bois de rose, synthetic)	2.9	
.alpha.-Pinene	4.1	
o-Dichlorobenzene	3.433	
Camphor	2.414	
Xylenes (o-, m-, p- isomers)	3.15	
Isophorone	1.67	
<b>Vapor Pressure</b>	23 hPa @ 20 °C	
<b>Density / Specific Gravity</b>	No data available	
<b>Bulk Density</b>	Not applicable	Liquid
<b>Vapor Density</b>	No data available	(Air = 1.0)
<b>Particle characteristics</b>	Not applicable (liquid)	

## 9.2. Other information

**Explosive Properties** explosive air/vapour mixtures possible

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous Polymerization** No information available.  
**Hazardous Reactions** None under normal processing.

### 10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

### 10.5. Incompatible materials

Oxidizing agent.

### 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen chloride. Gold oxide.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information

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## (a) acute toxicity;

Oral

Based on available data, the classification criteria are not met

Dermal

Based on available data, the classification criteria are not met

Inhalation

Based on available data, the classification criteria are not met

## Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Eucalyptus globulus, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates,	-	LD50 > 5000 mg/kg ( Rabbit )	-
Linalool (ex bois de rose, synthetic)	LD50 = 2790 mg/kg ( Rat )	LD50 = 5610 mg/kg ( Rabbit )	-
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc.	-	LD50 = 1200 mg/kg ( Rabbit )	-
.alpha.-Pinene	300-2000 mg/kg ( Rat )	> 5000 mg/kg ( Rat )	-
o-Dichlorobenzene	LD50 = 1516 mg/kg ( Rat )	LD50 > 10 g/kg ( Rabbit )	14,04 mg/L/4h (Rat)
Turpentine	LD50 = 5760 mg/kg ( Rat )	LD50 > 5010 mg/kg ( Rabbit )	LC50 = 13.7 mg/L ( Rat ) 4 h
Rosemary, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, e	-	LD50 > 10 mL/kg ( Rabbit )	-
Camphor	1310 mg/kg (Mouse) >5 g/kg (Rat)	>2 g/kg (Rat)	-
Xylenes (o-, m-, p- isomers)	LD50 = 3500 mg/kg ( Rat )	LD50 > 4350 mg/kg ( Rabbit )	29.08 mg/L [MOE Risk Assessment Vol.1, 2002]
Isophorone	LD50 = 1870 mg/kg ( Rat )	LD50 = 1700 mg/kg ( Rat )	LC50 = 7 mg/L ( Rat ) 4 h
Benzene, 1-methoxy-4-(1-propenyl)-	LD50 = 2090 mg/kg ( Rat )	-	-

## (b) skin corrosion/irritation;

Category 2

## (c) serious eye damage/irritation;

No data available

## (d) respiratory or skin sensitization;

Respiratory

No data available

Skin

Category 1

Component	Test method	Test species	Study result
o-Dichlorobenzene 95-50-1 ( 2.5 )	OECD Test Guideline 429 Local Lymph Node Assay	mouse	Sensitizer

No information available

## (e) germ cell mutagenicity;

No data available

Component	Test method	Test species	Study result
o-Dichlorobenzene 95-50-1 ( 2.5 )	OECD Test Guideline 476 Gene cell mutation	in vitro Animal germ cell	Positive
	OECD Test Guideline 471 Bacterial Reverse Mutation Test	in vitro Bacteria	negative
	OECD Test Guideline 473 Chromosomal aberration assay	in vitro Animal germ cell	negative
	OECD Test Guideline 474	in vivo	negative

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	Mouse micronucleus assay	Animal germ cell	
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(f) carcinogenicity; No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	EU	UK	Germany	IARC
Isophorone				Group 2B

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 2

Results / Target organs Respiratory system.

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Category 1

**Symptoms / effects, both acute and delayed** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

## 11.2. Information on other hazards

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity effects

The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system. Contains a substance which is: Very toxic to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Linalool (ex bois de rose, synthetic)	LC50: = 27.8 mg/L, 96h static (Oncorhynchus mykiss)	EC50: = 20 mg/L, 48h (Daphnia magna)	EC50: = 88.3 mg/L, 96h (Desmodesmus subspicatus)
.alpha.-Pinene	LC50: = 0.28 mg/L, 96h static (Pimephales promelas)	EC50 = 41 mg/L 48h	
o-Dichlorobenzene	LC50: 4.8 - 6.6 mg/L, 96h static (Lepomis macrochirus) LC50: = 5.2 mg/L, 96h flow-through (Brachydanio rerio) LC50: 42.6 - 80.4 mg/L, 96h static (Pimephales promelas) LC50: 8.23 - 10.9 mg/L, 96h flow-through (Pimephales promelas) LC50: 1.44 - 1.73 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 5.8 mg/L, 96h static (Pimephales promelas)	EC50: = 0.74 mg/L, 48h Static (Daphnia magna)	EC50: = 91.6 mg/L, 96h (Pseudokirchneriella subcapitata) EC50: 61.2 - 181 mg/L, 72h (Pseudokirchneriella subcapitata) EC50: = 2.2 mg/L, 96h static (Pseudokirchneriella subcapitata)
Xylenes (o-, m-, p- isomers)	LC50: 30.26 - 40.75 mg/L, 96h static (Poecilia reticulata) LC50: = 780 mg/L, 96h	LC50: = 0.6 mg/L, 48h (Gammarus lacustris) EC50: = 3.82 mg/L, 48h (water)	

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	semi-static (Cyprinus carpio) LC50: 23.53 - 29.97 mg/L, 96h static (Pimephales promelas) LC50: > 780 mg/L, 96h (Cyprinus carpio) LC50: 7.711 - 9.591 mg/L, 96h static (Lepomis macrochirus) LC50: = 19 mg/L, 96h (Lepomis macrochirus) LC50: 13.1 - 16.5 mg/L, 96h flow-through (Lepomis macrochirus) LC50: 13.5 - 17.3 mg/L, 96h (Oncorhynchus mykiss) LC50: 2.661 - 4.093 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 13.4 mg/L, 96h flow-through (Pimephales promelas)	flea)	
Isophorone	LC50: 132 - 159 mg/L, 96h flow-through (Pimephales promelas) LC50: 213 - 271 mg/L, 96h static (Pimephales promelas) LC50: 180 - 250 mg/L, 96h static (Lepomis macrochirus)	EC50: = 117 mg/L, 48h (Daphnia magna)	EC50: 51.1 - 342 mg/L, 96h (Pseudokirchneriella subcapitata) EC50: = 475.4 mg/L, 72h (Desmodesmus subspicatus)

Component	Microtox	M-Factor
Linalool (ex bois de rose, synthetic)	EC50 = 1000 mg/L 30 min	
.alpha.-Pinene		1
o-Dichlorobenzene	EC50 = 4.76 mg/L 5 min EC50 = 4.98 mg/L 15 min EC50 = 5.99 mg/L 30 min	1
Xylenes (o-, m-, p- isomers)	EC50 = 0.0084 mg/L 24 h	

**12.2. Persistence and degradability** Product contains heavy metals. Discharge into the environment must be avoided. Special pre-treatment is necessary

**Persistence** Immiscible with water, May persist, based on information available.

Component	Degradability
o-Dichlorobenzene 95-50-1 ( 2.5 )	0 % (28d) OECD 301C

**Degradation in sewage treatment plant** Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**12.3. Bioaccumulative potential** May have some potential to bioaccumulate; Product has a high potential to bioconcentrate

Component	log Pow	Bioconcentration factor (BCF)
Linalool (ex bois de rose, synthetic)	2.9	No data available
.alpha.-Pinene	4.1	No data available
o-Dichlorobenzene	3.433	90 - 260 dimensionless
Camphor	2.414	No data available
Xylenes (o-, m-, p- isomers)	3.15	0.6 - 15 dimensionless
Isophorone	1.67	7 dimensionless

**12.4. Mobility in soil** Spillage unlikely to penetrate soil The product evaporates slowly Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil

**12.5. Results of PBT and vPvB assessment** No data available for assessment.

## 12.6. Endocrine disrupting properties

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

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**12.7. Other adverse effects**  
**Persistent Organic Pollutant**  
**Ozone Depletion Potential**

This product does not contain any known or suspected substance  
This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste from Residues/Unused Products**

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging**

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

**European Waste Catalogue (EWC)**

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

**Other Information**

Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Can be landfilled or incinerated, when in compliance with local regulations. Do not let this chemical enter the environment. Do not empty into drains.

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

<b>14.1. UN number</b>	UN1993
<b>14.2. UN proper shipping name</b>	Flammable liquid, n.o.s.
<b>Technical Shipping Name</b>	(Dinkum oil, alpha-PINENE)
<b>14.3. Transport hazard class(es)</b>	3
<b>14.4. Packing group</b>	III

### ADR

<b>14.1. UN number</b>	UN1993
<b>14.2. UN proper shipping name</b>	Flammable liquid, n.o.s.
<b>Technical Shipping Name</b>	(Dinkum oil, alpha-PINENE)
<b>14.3. Transport hazard class(es)</b>	3
<b>14.4. Packing group</b>	III

### IATA

<b>14.1. UN number</b>	UN1993
<b>14.2. UN proper shipping name</b>	Flammable liquid, n.o.s.
<b>Technical Shipping Name</b>	(Dinkum oil, alpha-PINENE)
<b>14.3. Transport hazard class(es)</b>	3
<b>14.4. Packing group</b>	III

**14.5. Environmental hazards**

Dangerous for the environment  
Product is a marine pollutant according to the criteria set by IMDG/IMO

**14.6. Special precautions for user**

No special precautions required.

**14.7. Maritime transport in bulk**

Not applicable, packaged goods

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according to IMO instruments

## SECTION 15: REGULATORY INFORMATION

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

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Eucalyptus globulus, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates,	84625-32-1	283-406-2	-	-	X	X	KE-05-0630	-	-
Proprietary resins/waxes	N/A	-	-	-	-	-	-	-	-
Proprietary organo-gold compound	N/A	-	-	-	-	-	-	-	-
Linalool (ex bois de rose, synthetic)	78-70-6	201-134-4	-	-	X	X	KE-11592	X	X
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc.	84961-50-2	284-638-7	-	-	X	X	-	-	-
.alpha.-Pinene	80-56-8	201-291-9	-	-	X	X	KE-34427	X	X
o-Dichlorobenzene	95-50-1	202-425-9	-	-	X	X	KE-10066	X	X
Turpentine	8006-64-2	232-350-7	-	-	X	X	KE-35026	X	X
Rosemary, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, e	84604-14-8	283-291-9	-	-	X	X	-	-	-
Camphor	76-22-2	200-945-0	-	-	X	X	KE-34423	X	X
Xylenes (o-, m-, p- isomers)	1330-20-7	215-535-7	-	-	X	X	KE-35427	X	X
Isophorone	78-59-1	201-126-0	-	-	X	X	KE-34467	X	X
Benzene, 1-methoxy-4-(1-propenyl)-	104-46-1	203-205-5	-	-	X	X	KE-23382	X	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Eucalyptus globulus, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates,	84625-32-1	-	-	X	-	X	X	X
Proprietary resins/waxes	N/A	-	-	-	-	-	-	-
Proprietary organo-gold compound	N/A	-	-	-	-	-	-	-
Linalool (ex bois de rose, synthetic)	78-70-6	X	ACTIVE	X	-	X	X	X
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc.	84961-50-2	-	-	X	-	X	X	X
.alpha.-Pinene	80-56-8	X	ACTIVE	X	-	X	X	X
o-Dichlorobenzene	95-50-1	X	ACTIVE	X	-	X	X	X

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Turpentine	8006-64-2	X	ACTIVE	X	-	X	X	X
Rosemary, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, e	84604-14-8	-	-	X	-	X	X	X
Camphor	76-22-2	X	ACTIVE	X	-	X	X	X
Xylenes (o-, m-, p- isomers)	1330-20-7	X	ACTIVE	X	-	X	X	X
Isophorone	78-59-1	X	ACTIVE	X	-	X	X	X
Benzene, 1-methoxy-4-(1-propenyl)-	104-46-1	X	ACTIVE	X	-	X	X	X

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

## Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Eucalyptus globulus, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates,	84625-32-1	-	-	-
Proprietary resins/waxes	N/A	-	-	-
Proprietary organo-gold compound	N/A	-	-	-
Linalool (ex bois de rose, synthetic)	78-70-6	-	Use restricted. See item 75. (see link for restriction details)	-
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc.	84961-50-2	-	-	-
.alpha.-Pinene	80-56-8	-	-	-
o-Dichlorobenzene	95-50-1	-	Use restricted. See item 75. (see link for restriction details)	-
Turpentine	8006-64-2	-	Use restricted. See item 75. (see link for restriction details)	-
Rosemary, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, e	84604-14-8	-	-	-
Camphor	76-22-2	-	-	-
Xylenes (o-, m-, p- isomers)	1330-20-7	-	Use restricted. See item 75. (see link for restriction details)	-
Isophorone	78-59-1	-	Use restricted. See item 75. (see link for restriction details)	-
Benzene, 1-methoxy-4-(1-propenyl)-	104-46-1	-	-	-

### REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

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## Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Eucalyptus globulus, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates,	84625-32-1	Not applicable	Not applicable
Proprietary resins/waxes	N/A	Not applicable	Not applicable
Proprietary organo-gold compound	N/A	Not applicable	Not applicable
Linalool (ex bois de rose, synthetic)	78-70-6	Not applicable	Not applicable
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc.	84961-50-2	Not applicable	Not applicable
.alpha.-Pinene	80-56-8	Not applicable	Not applicable
o-Dichlorobenzene	95-50-1	Not applicable	Not applicable
Turpentine	8006-64-2	Not applicable	Not applicable
Rosemary, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, e	84604-14-8	Not applicable	Not applicable
Camphor	76-22-2	Not applicable	Not applicable
Xylenes (o-, m-, p- isomers)	1330-20-7	Not applicable	Not applicable
Isophorone	78-59-1	Not applicable	Not applicable
Benzene, 1-methoxy-4-(1-propenyl)-	104-46-1	Not applicable	Not applicable

## Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

## Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

## National Regulations

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

## WGK Classification

Water endangering class = 3 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Eucalyptus globulus, extract Extractives and their physically modified derivatives such as	WGK2	



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tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates,		
Linalool (ex bois de rose, synthetic)	WGK1	
Clove, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, etc.	WGK2	
.alpha.-Pinene	WGK3	
o-Dichlorobenzene	WGK2	
Turpentine	WGK2	
Rosemary, extract Extractives and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues, e	WGK2	
Camphor	WGK1	Class I : 20 mg/m <sup>3</sup> (Massenkonzentration)
Xylenes (o-, m-, p- isomers)	WGK2	
Isophorone	WGK1	Class I : 20 mg/m <sup>3</sup> (Massenkonzentration)
Benzene, 1-methoxy-4-(1-propenyl)-	WGK2	

Component	France - INRS (Tables of occupational diseases)
o-Dichlorobenzene	Tableaux des maladies professionnelles (TMP) - RG 9
Turpentine	Tableaux des maladies professionnelles (TMP) - RG 65,RG 84
Xylenes (o-, m-, p- isomers)	Tableaux des maladies professionnelles (TMP) - RG 4bis,RG 84
Isophorone	Tableaux des maladies professionnelles (TMP) - RG 84

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
o-Dichlorobenzene 95-50-1 ( 2.5 )	Prohibited and Restricted Substances		
Xylenes (o-, m-, p- isomers) 1330-20-7 ( 0.25 )	Prohibited and Restricted Substances	Group II	
Benzene, 1-methoxy-4-(1-propenyl)- 104-46-1 ( 0.25 )	Prohibited and Restricted Substances		

## 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H371 - May cause damage to organs

H411 - Toxic to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapor

H226 - Flammable liquid and vapor

H228 - Flammable solid

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H302 - Harmful if swallowed  
H312 - Harmful in contact with skin  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H335 - May cause respiratory irritation  
H351 - Suspected of causing cancer  
H400 - Very toxic to aquatic life  
H410 - Very toxic to aquatic life with long lasting effects

## Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer  
Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

### **Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

### **Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

**Physical hazards** On basis of test data

**Health Hazards** Calculation method

**Environmental hazards** Calculation method

### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Prepared By** Health, Safety and Environmental Department

**Revision Date** 17-Mar-2024

**Revision Summary** New emergency telephone response service provider.

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text

**End of Safety Data Sheet**