

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 4/2/2019 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

Substance name : Tangerine Essential Oil
Chemical name : Citrus Reticulata Peel Oil

EC Index-No. : 284-521-0 EC-No. : 284-521-0

CAS-No. : 8008-31-9/ 84929-38-4

Other means of identification : Citrus Reticulata Peel Oil is the volatile oil obtained from the peel of tangerine, Citrus

reticulata, Rutaceae

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use

Use of the substance/mixture : Suitable for use in flavour, fragrance cosmetic and professional applications only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Naissance

Unit 9 & 11 Milland Road Industrial Estate

Milland Road

SA11 1NJ Neath - United Kingdom

www.discoveringbetter.com

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226
Skin corrosion/irritation, Category 2 H315
Skin sensitisation, Category 1 H317
Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)







GHS02

GHS07

GHS08

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H226 - Flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H410 - Very toxic to aquatic life with long lasting effects.

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Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.

P241 - Use explosion-proof . equipment.

P261 - Avoid breathing vapours, spray, mist.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective clothing, eye protection, face protection.

P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or shower. P331 - Do NOT induce vomiting.

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.

P370+P378 - In case of fire: Use carbon dioxide, dry chemical, foam for extinction to

extinguish.

P391 - Collect spillage.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

 $\mathsf{P501}$ - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

 Name
 : Tangerine Essential Oil

 CAS-No.
 : 8008-31-9/84929-38-4

EC-No. : 284-521-0 EC Index-No. : 284-521-0

	0. 0 0	
Name	Product identifier	%
Limonene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5	<= 98
Myrcene	(CAS-No.) 123-35-3 (EC-No.) 204-622-5	<= 4
Alpha-Pinene	(CAS-No.) 80-56-8 / 7785-26-4 (EC-No.) 201-291-9	<= 2
Linalool	(CAS-No.) 78-70-6 (EC-No.) 201-134-4	<= 1
gamma-Terpinene	(CAS-No.) 99-85-4 (EC-No.) 202-794-6	<= 1
Decanal	(CAS-No.) 112-31-2	<= 1
Beta-Pinene	(CAS-No.) 127-91-3 (EC-No.) 204-872-5	<= 1
Citral	(CAS-No.) 5392-40-5 (EC-No.) 226-394-6	<= 0.2

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get immediate medical advice/attention.

advice/attenti

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin

irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting. Rinse mouth. Get immediate medical advice/attention.

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

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after ingestion : Risk of lung oedema.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder, Foam, Carbon dioxide, Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Precautionary measures fire : Evacuate area. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. Firefighting instructions : Cool laterally with water containers exposed to flames, even after the fire is extinguished. Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Remove ignition sources. Evacuate area.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with

skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent liquid from entering sewers, watercourses, underground or low areas.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Clean up any spills as soon as possible, using an absorbent material to collect it. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures

: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Ground/bond container and receiving equipment.

Storage conditions

Incompatible products

: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

: Strong bases, Strong acids, Oxidizing agent.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Alnha-Pinene	/20_56_2	/ 7785_26_4

Germany	TRGS 910 Acceptable concentration notes	
USA - ACGIH	ACGIH TWA (ppm)	20 ppm

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Beta-Pinene (127-91-3)		
Germany	TRGS 910 Acceptable concentration notes	
USA - ACGIH	ACGIH TWA (ppm)	20 ppm

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Vear suitable protective clothing
Respiratory protection:
n case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Boiling point





Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical state : Liquid Colour : Characteristic. Odour : characteristic. Odour threshold : No data available : No data available Relative evaporation rate (butylacetate=1) : No data available : Not applicable Melting point Freezing point : No data available

Flash point : 45 °C

Auto-ignition temperature: No data availableDecomposition temperature: No data availableFlammability (solid, gas): Not applicableVapour pressure: No data availableRelative vapour density at 20 °C: No data availableRelative density: No data availableDensity: $\approx 0.857 \otimes 20^{\circ}$ C

Solubility : Water: Insoluble in water

Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

Refractive index : ≈ 1.476 @ 20°C

: No data available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong bases. Strong acids. Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

Tangerine Essential Oil (8008-31-9/84929-38-4)

LD50 oral 8397144

Limonene (5989-27-5)

LD50 oral rat	4400 mg/kg
LD50 dermal	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 20 mg/l

Myrcene (123-35-3)

	LD50 oral	> 2000 mg/kg
	LD50 dermal	> 2000 mg/kg
	LC50 inhalation rat (mg/l)	> 20 mg/l/4h

Alpha-Pinene (80-56-8 / 7785-26-4)

LD50 oral rat 3700 mg/kg

Linalool (78-70-6)

LD50 oral rat	3000 mg/kg
LD50 oral	2790 mg/kg
LD50 dermal rabbit	5610 mg/kg
LC50 inhalation rat (mg/l)	> 20 mg/l/4h

Beta-Pinene (127-91-3)

LD50 dermal rat	≈ 4700 mg/kg
Skin corrosion/irritation :	Causes skin irritation.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

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SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: Very toxic to aquatic life with long lasting effects.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Very toxic to aquatic life with long lasting effects.
Limonene (5989-27-5)	
LC50 fish 1	≈ 33 mg/l
EC50 Daphnia 1	0.1 - 1 mg/l
ErC50 (algae)	0.1 - 1 mg/l
Linalool (78-70-6)	
LC50 fish 1	27.8 mg/l
EC50 Daphnia 1	59 mg/l
EC50 96h algae (1)	88.3 mg/l
12.2. Persistence and degradability	1
Limonene (5989-27-5)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.
Myrcene (123-35-3)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.
Alpha-Pinene (80-56-8 / 7785-26-4)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.
Linalool (78-70-6)	
Persistence and degradability	Not established.
Tersistence and degradability	not established.
gamma-Terpinene (99-85-4)	
Persistence and degradability	Not established.
Decanal (112-31-2)	
Persistence and degradability	Not established.
Beta-Pinene (127-91-3)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.
Citral (5392-40-5)	
Persistence and degradability	Not established.
12.3. Bioaccumulative potential	
Limonene (5989-27-5)	
Bioaccumulative potential	Not established.
Marrage (422-25-2)	
Myrcene (123-35-3)	5.00
Log Pow	5.29
Bioaccumulative potential	Not established.
Alpha-Pinene (80-56-8 / 7785-26-4)	
Bioaccumulative potential	Not established.

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Linalool (78-70-6)	
Log Pow	2.84 - 3.1
Bioaccumulative potential	Not established.

gamma-Terpinene (99-85-4)		
Rioaccumulative notential	Not established	

Decanal (112-31-2)		
	Bioaccumulative potential	Not established.

Beta-Pinene (127-91-3)	
Bioaccumulative potential	Not established.

Citral (5392-40-5)	
Bioaccumulative potential	Not established.
40 4 55 1 1114 1 11	

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Must follow special treatment according to local regulation.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

In accordance with ADR / RID / IMDG / IATA / ADN				
ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1169	UN 1169	UN 1169	UN 1169	UN 1169
14.2. UN proper shippin	g name			
EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID	Extracts, aromatic, liquid	EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID
Transport document descr	iption			
UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, MARINE POLLUTANT/ENVIRONME NTALLY HAZARDOUS	UN 1169 Extracts, aromatic, liquid, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard	class(es)			
3	3	3	3	3
	***************************************	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
14.4. Packing group				
III	III	III	III	III

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14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 601
Limited quantities (ADR) : 51
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions : T2

ADR)

Portable tank and bulk container special provisions

(ADR)

Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12

Special provisions for carriage - Operation (ADR) : S2 Hazard identification number (Kemler No.) : 30

Orange plates

30 1169

: TP1

Tunnel restriction code (ADR) : D/E EAC code : 3YE

Transport by sea

Special provisions (IMDG): 223, 955Limited quantities (IMDG): 5 LExcepted quantities (IMDG): E1

Packing instructions (IMDG) : P001, LP01
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T2
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Stowage category (IMDG) : A

Properties and observations (IMDG) : Usually consist of alcoholic solutions. Miscibility with water depends upon the composition.

Air transport

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) : Y344 PCA limited quantity max net quantity (IATA) : 10L PCA packing instructions (IATA) : 355 : 60L PCA max net quantity (IATA) CAO packing instructions (IATA) : 366 CAO max net quantity (IATA) : 220L Special provisions (IATA) : A3 ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Special provisions (ADN) : 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Equipment required (ADN) : PP, EX, A

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Ventilation (ADN) : VE Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : F1
Special provisions (RID) : 601
Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions : TP1
(RID)

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Tangerine Essential Oil is not on the REACH Candidate List

Tangerine Essential Oil is not on the REACH Annex XIV List

Tangerine Essential Oil is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Tangerine Essential Oil is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

SECTION 10. Other information		
Full text of H- and EUH-statements:		
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1	
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3	
Asp. Tox. 1	Aspiration hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1B	Skin sensitisation, category 1B	
H226	Flammable liquid and vapour.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H400	Very toxic to aquatic life.	

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H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product