Nutmeg Essential Oil

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 2019/02/15 Version: 1.0

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

1.1. Product identifier

Product form	: Substance
Substance name	: Nutmeg Essential Oil
Chemical name	: Myristica fragrans (nutmeg) kernel oil
EC-No.	: 282-013-3
CAS-No.	: 8008-45-5 / 84082-68-8
Product code	: 135

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only
Industrial

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
Germ cell mutagenicity, Category 2	H341
Carcinogenicity, Category 1A	H350
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. May cause cancer. Suspected of causing genetic defects. 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.
H341 - Suspected of causing genetic defects.
H350 - May cause cancer.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P243 - Take action to prevent static discharges.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P242 - Use non-sparking tools.
P240 - Ground and bond container and receiving 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.
P405 - Store locked up.
P501 - Dispose of contents 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 : Nutmeg Essential Oil
CAS-No. : 8008-45-5 / 84082-68-8
EC-No. : 282-013-3

Name	Product identifier	%
Sabinene	(CAS-No.) 3387-41-5 (EC-No.) 222-212-4	25 - 45
Alpha-Pinene	(CAS-No.) 80-56-8 / 7785-26-4 (EC-No.) 201-291-9	10 - 20
Beta-Pinene	(CAS-No.) 127-91-3 (EC-No.) 204-872-5	10 - 20
Alpha Terpinene	(CAS-No.) 99-86-5 (EC-No.) 202-795-1	3 - 8
Terpinene-4-ol	(CAS-No.) 562-74-3 (EC-No.) 209-235-5	3 - 8
gamma-Terpinene	(CAS-No.) 99-85-4 (EC-No.) 202-794-6	2 - 7
Limonene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5	2 - 7
alpha-Terpineol	(CAS-No.) 98-55-5 (EC-No.) 202-680-6	2 - 7
Myristicin	(CAS-No.) 607-91-0 (EC-No.) 210-146-9	1 - 4
Elemicin	(CAS-No.) 487-11-6 (EC-No.) 207-649-0	1 - 4
Myrcene	(CAS-No.) 123-35-3 (EC-No.) 204-622-5	1 - 4
beta-Phellandrene	(CAS-No.) 555-10-2 (EC-No.) 209-081-9	1 - 4
Terpinolene	(CAS-No.) 586-62-9 (EC-No.) 209-578-0	1 - 3
alpha Thugone	(CAS-No.) 76231-76-0	1 - 3
Safrole	(CAS-No.) 94-59-7 (EC-No.) 202-345-4 (EC Index-No.) 605-020-00-9	1 - 3
Eugenol	(CAS-No.) 97-53-0 (EC-No.) 202-589-1	0 - 1
Methyl Eugenol	(CAS-No.) 93-15-2 (EC-No.) 202-223-0	0 - 1

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 general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin with plenty of water. Take off 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.

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

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

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

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

5.3. Advice for firefighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so. Evacuate area. Stop leak if safe to do so.

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

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. 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 entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

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

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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. 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

Storage conditions : 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 smoking.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Alpha-Pinene (80-56-8 / 7785-26-4)		
Germany	TRGS 910 Acceptable concentration notes	
USA - ACGIH	ACGIH TWA (ppm)	20 ppm

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.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: pale yellow - greenish.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 40 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0,88 - 0,91 @25ºC

Solubility	: Water: not soluble Ethanol: 1 part miscible with 5 parts ethanol (80% v/v) at 20 °C
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 : 1,474 - 1,488 at 20 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

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

Carbon dioxide. Carbon monoxide.

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

Nutmeg Essential Oil (8008-45-5 / 84082-68-8)	
LD50 oral rat	2620 mg/kg
LD50 dermal rabbit	10 g/kg

Alpha-Pinene (80-56-8 / 7785-26-4)	
LD50 oral rat	3700 mg/kg

Beta-Pinene (127-91-3)	
LD50 dermal rat	≈ 4700 mg/kg

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

Eugenol (97-53-0)	
LD50 oral	1930 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	: Suspected of causing genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects. Before neutralisation, the product may represent a danger to aquatic organisms.
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

12.2. Persistence and degradability

Sabinene (3387-41-5)	
Persistence and degradability	Not established.

Alpha-Pinene (80-56-8 / 7785-26-4)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

Beta-Pinene (127-91-3)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

Alpha Terpinene (99-86-5)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

Terpinene-4-ol (562-74-3)	
Persistence and degradability	Not established.

gamma-Terpinene (99-85-4)	
Persistence and degradability	Not established.

Limonene (5989-27-5)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

alpha-Terpineol (98-55-5)	
Persistence and degradability	Not established.

Terpinolene (586-62-9)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

Myristicin (607-91-0)	
Persistence and degradability	Not established.

Elemicin (487-11-6)	
Persistence and degradability	Not established.

Myrcene (123-35-3)	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

beta-Phellandrene (555-10-2)	
Persistence and degradability	Not established.

alpha Thugone (76231-76-0)	
Persistence and degradability	Not established.

Safrole (94-59-7)	
Persistence and degradability	Not established.

Eugenol (97-53-0)	
Persistence and degradability	Not established.

Methyl Eugenol (93-15-2)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Sabinene (3387-41-5)	
Bioaccumulative potential	Not established.

Alpha-Pinene (80-56-8 / 7785-26-4)	
Bioaccumulative potential	Not established.

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

Alpha Terpinene (99-86-5)	
Bioaccumulative potential	Not established.

Terpinene-4-ol (562-74-3)	
Bioaccumulative potential	Not established.

gamma-Terpinene (99-85-4)	
Bioaccumulative potential	Not established.

Limonene (5989-27-5)	
Bioaccumulative potential	Not established.

alpha-Terpineol (98-55-5)	
Bioaccumulative potential	Not established.

Terpinolene (586-62-9)	
Bioaccumulative potential	Not established.

Myristicin (607-91-0)	
Bioaccumulative potential	Not established.

Elemicin (487-11-6)	
Bioaccumulative potential	Not established.

Myrcene (123-35-3)	
Log Pow	5,29
Bioaccumulative potential	Not established.

beta-Phellandrene (555-10-2)	
Bioaccumulative potential	Not established.

alpha Thugone (76231-76-0)	
Bioaccumulative potential	Not established.

Safrole (94-59-7)	
Bioaccumulative potential	Not established.

Eugenol (97-53-0)	
Bioaccumulative potential	Not established.

Methyl Eugenol (93-15-2)	
Bioaccumulative potential	Not established.

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1169	UN 1169	UN 1169	UN 1169	UN 1169
14.2. UN proper shipping name				
EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID	Extracts, aromatic, liquid	EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID
Transport document description				
UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, MARINE POLLUTANT/ENVIRONMENTALLY 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
				

14.4. Packing group

III	III	III	III	III

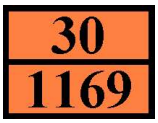
14.5. Environmental hazards

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)	: 5l
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP1
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	: 
Tunnel restriction code (ADR)	: D/E
EAC code	: 3YE

Transport by sea

Special provisions (IMDG)	: 223, 955
Limited quantities (IMDG)	: 5 L
Excepted 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
PCA max net quantity (IATA)	: 60L
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
Ventilation (ADN)	: VE01
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 (RID)	: TP1
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
Nutmeg Essential Oil is not on the REACH Candidate List
Nutmeg Essential Oil is not on the REACH Annex XIV List
Nutmeg 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.
Nutmeg 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

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
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 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1

Carc. 1A	Carcinogenicity, Category 1A
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 2	Germ cell mutagenicity, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic 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