





Material Safety Data Sheet:

Black Pepper Essential Oil

01. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

1.1 Product Identifier					
Product Name		Black Pepper Oil			
Biological Definition		The volatile oil obtained by steam distillation from the dried slightly unripe fruits of <i>Piper nigrum</i> L.			
INCI Name		Piper nigrum fruit oil			
Synonyms & Trade Names		-			
CAS-No	84929-41-9	EC No.	284-524-7	EINECS No.	284-524-7
1.2 Relative identified uses of the substance or mixture and uses advised against					
No additional data available.					
1.3 Details of the supplier of the safety data sheet					
NTM UK LTD, 69 Bethel Street, Norwich, Norfolk, United Kingdom NR2 1NR					
1.4 Emergency Tel. No.		+44(0)1603 610883			

02. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture			
The Full Text for all Hazard Statements is displayed in Section 16.			
Classification (EC 1272/2008)			
Physical and Chemical Hazards:	Flam. Liq. 3 H226 Flammable liquid and vapour.		
Human health:	Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.		
	Skin Irrit. 2 H315 Causes skin irritation.		
	Skin Sens. 1 H317 May cause an allergic skin reaction.		
Environment:	Aquatic Acute 1 H400 Very toxic to aquatic life.		
	Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.		
2.2 Label Elements			
Label in accordance with (EC) No 1272/2008			
GHS02	GHS08	GHS07	GHS09
			
Signal Word		Danger	
Contains		Caryophyllene, d-limonene, beta-Pinene, delta-3-Carene.	
Hazard Statements			
H226 Flammable liquid and vapour			
H315 Causes skin irritation			
H317 May cause an allergic skin reaction.			
H304 May be fatal if swallowed and enters airways.			
H410 Very toxic to aquatic life with long lasting effects.			

Precautionary Statements
<p>P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.</p> <p>P241 Use explosion-proof electrical/ventilating/lighting/equipment.</p> <p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray..</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P240 Ground/bond container and receiving equipment.</p> <p>P233 Keep container tightly closed.</p> <p>P242 Use only non-sparking tools.</p> <p>P273 Avoid release to the environment.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P362 Take off contaminated clothing and wash before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P332+P313 If skin irritation occurs: Get medical advice/attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P331 Do NOT induce vomiting.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of soap and water.</p> <p>P391 Collect spillage.</p> <p>P405 Store locked up.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P501 Dispose of contents/container in accordance with local/regional/national/international regulations.</p>
Supplementary Precautionary Statements
None.

2.3 Other Hazards	
PBT or vPvB according to Annex XIII	Not applicable
Adverse physio-chemical properties	Flam. Liq. 3 H226 Flammable liquid and vapour
Adverse effects on human health	Asp. Tox. 1 H304 May be fatal if swallowed and enters airways. Skin Irrit. 2 H315 Causes skin irritation Skin Sens. 1 H317 May cause an allergic skin reaction.

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures	
20.0 – 35.0% Caryophyllene CAS-No.: 87-44-5 EC No.: 201-746-1 Classification (EC 1272/2008) Asp. Tox. 1 - H304	
15.0 – 25.0% d-Limonene CAS-No.: 5989-27-5 EC No.: 227-813-5 Classification (EC 1272/2008) Flam. Liq. 3, H226, Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Irrit. 2, H315; Skin Sens. 1, H317	
5.0 – 15.0% Beta-Pinene CAS-No.: 127-91-3 EC No.: 204-872-5 Classification (EC 1272/2008) Flam. Liq. 3, H226, Asp. Tox. 1, H304, Aquatic Acute 1, H400; Aquatic Chronic 1, H410, Skin Sens. 1, H317	
5.0 – 15.0% delta-3-Carene CAS-No.: 13466-78-9 EC No.: 236-719-3 Classification (EC 1272/2008) Flam. Liq. 3, H226, Asp. Tox. 1, H304, Aquatic Chronic 2, H411 Skin Sens. 1, H317	

04. FIRST AID MEASURES

4.1	Description of first aid measures
Inhalation	Remove immediately from source of exposure to fresh air. Get medical attention if any discomfort continues.
Ingestion	DO NOT INDUCE VOMITING! Immediately rinse mouth and provide fresh air. Get medical attention.
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort or skin irritation occurs.
Eye Contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.
4.2	Most important symptoms and effects, both acute and delayed
	The severity of the symptoms described will vary depending of the concentration and the length of exposure. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction
4.3	Indication of any immediate medical attention and special treatment needed
	No additional data available.

05. FIRE-FIGHTING MEASURES

5.1	Extinguishing Media
	Extinguishing media: Use fire extinguishing methods suitable to surrounding conditions. Unsuitable extinguishing media: Water.
5.2	Special hazards arising from the product
	Formation of toxic gases is possible during heating or in case of fire.
5.3	Advice for firefighters
	Wear self-contained respiratory protective device. Wear fully protective suit.


06. ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment and emergency procedures
	Ensure adequate ventilation. Wear necessary protective equipment. Avoid contact with eyes and skin. Avoid breathing vapours.
6.2	Environmental Precautions
	Do not discharge into drains, water courses or onto the ground.
6.3	Methods and material for containment and cleaning up.
	Cover with an inert, inorganic, non-combustible absorbent material (e.g dry-lime, sand, soda ash). Place in covered containers using non-sparking tools and transport outdoors. Avoid open flames or sources of ignition. Ventilate area and wash spill site after material pickup is complete. Dispose of in accordance with current laws and regulations.
6.4	Reference to other sections
	See sections 7, 8, 13.

07. HANDLING AND STORAGE

7.1	Precautions for safe handling
	The usual precautionary measures are to be adhered to when handling chemicals. Ensure good ventilation/exhaustion at the workplace. Avoid contact with eyes and skin. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of work. Keep ignition sources away - Do not smoke.
7.2	Conditions for safe storage, including any incompatibilities
	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.
7.3	Specific end use(s)
	No additional data available.

08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	Control parameters
	Linalool (CAS: 78-70-6) Ingredient Comments : No exposure limits noted for ingredient.
8.2	Exposure controls
Protective Equipment	
	
Process Conditions	Provide eyewash station.
Engineering Measures	Provide adequate ventilation. Use engineering controls to reduce air contamination.
Respiratory Equipment	Do not inhale gases / fumes / aerosols. Certified respiratory protective device recommended. NIOSH or European Standard EN 149 approved respirator.
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 protective gloves and has to be observed.
Eye Protection	Avoid contact with eyes. Wear approved safety goggles. (EN166).
Other Protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.
Personal Protection	Avoid contact with skin and eyes. Use personal protection according to Directive 89/686/EEC.
Skin Protection	Avoid contact with skin. Wear apron or protective clothing.
Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorised companies.

09. 09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Mobile liquid, Clear pale green / yellow or blue green.
Colour	Clear pale green / yellow or blue green.
Odour	Characteristic, warm, spicy.
Relative Density	0.864 - 0.884 @ 20°C
Flash Point (°C)	46.0 - 50.0
Refractive Index	1.474 - 1.492 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	No additional data available.
Vapour Pressure	No additional data available.
Solubility in Water @20°C	Insoluble in water.
Auto-ignition temperature (°C)	No additional data available.

9.2 Other information	
No additional data available.	

10. 10. STABILITY AND REACTIVITY

10.1 Reactivity	
Stable under the recommended handling and storage conditions.	
10.2 Chemical stability	
Stable under the recommended handling and storage conditions.	
10.3 Possible hazardous reactions	
Flammable liquid.	
10.4 Conditions to Avoid	
Avoid heat, sparks and open flames.	
10.5 Incompatible materials	
Materials To Avoid: Avoid strong oxidising agents.	
10.6 Hazardous Decomposition Products	
Toxic gases / vapours may be formed during combustion.	

11. 11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	No additional data available.
Skin corrosion / irritation	Irritant to skin and mucous membranes. May cause allergic skin reaction.
Serious eye damage / irritation	No specific health warnings noted.
Respiratory or skin sensitisation	May be fatal if swallowed and enters airways.
Germ Cell Mutagenicity	No additional data available.
Carcinogenicity	No additional data available.
Reproductive toxicity	No additional data available.
STOT-single exposure	No additional data available.
STOT-repeated exposure	No additional data available.
Photo-toxicity	No additional data available.
Other Information	Classification Guidelines for Preparations as issued in the latest version: Irritant.



12. ECOLOGICAL INFORMATION

12.1 Toxicity
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.
12.2 Persistence & degradability
No additional data available.
12.3 Bioaccumulation Potential
No additional data available.
12.4 Mobility in soil
Very toxic to aquatic life with long lasting effects. Avoid transfer into the environment.
12.5 Results of PBT and vPvB Assessment
PBT: Not applicable. vPvB: Not applicable.
12.6 Other adverse effects
Do not allow product to enter streams, sewers or other waterways.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Dispose of in compliance with all local and national regulations.

14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	UN 1169
UN No. SEA	UN 1169
UN No. AIR	UN 1169
14.2 UN proper shipping name	
ADR: 1169 EXTRACTS, AROMATIC, LIQUID, ENVIRONMENTALLY HAZARDOUS, special provision 640E IMDG: EXTRACTS, AROMATIC, LIQUID (d-limonene, beta-Pinene), MARINE POLLUTANT IATA: EXTRACTS, AROMATIC, LIQUID.	
14.3 Transport hazard class(es)	
ADR/RID/ADN Class:	3 Flammable Liquid
ICAO Class/Division:	3
IMDG Class:	3
Transport Labels	
	
14.4 Packing group	
ADR/RID/ADN Class:	III
IMDG Packing group	III
ICAO Packing group	III
14.5 Environmental hazards	
Environmentally Hazardous Substance/Marine Pollutant	
	
14.6 Special precautions for user	
Warning: flammable liquid.	
Danger code (Kemler): 30	
EMS Number: F-E,S-D	
ADR	
Limited quantities (LQ): 5L	
Excepted quantities (EQ)	
Code: E1	
Maximum net quantity per inner packaging: 30 ml	
Maximum net quantity per outer packaging: 1000 ml	
Transport category: 3	
Tunnel restriction code: D/E	
IMDG	
Limited quantities (LQ): 5L	
Accepted quantities (EQ):	
Code: E1	
Maximum net quantity per inner packaging: 30 ml	
Maximum net quantity per outer packaging: 1000 ml	
UN "Model Regulation": UN1169, EXTRACTS, AROMATIC, LIQUID, special provision 640E	

ENVIRONMENTALLY HAZARDOUS, 3, III
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code
No additional data available.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
<p>Statutory Instruments The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Guidance Notes Workplace Exposure Limits EH40. CHIP for everyone HSG(108). EU Legislation 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>
15.2 Chemical safety assessment
No additional information available.

16. OTHER INFORMATION

Hazard and/or Precautionary Statements in Full	<p>H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H304 May be fatal if swallowed and enters airways. H317 May cause an allergic skin reaction. H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.</p>
Other Information	None.
Revision Date	26/04/18
Reason for revision	Updated New Format SDS.
Rev No/Repl, SDS Generated	01

DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.