





MATERIAL SAFETY DATA SHEET

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

1.1 Product Identifier					
Product Name		Turmeric Essential Oil			
Biological Definition		Curcuma longa L.			
INCI Name		Curcuma Longa Root Oil			
Synonyms & Trade Names					
CAS-No	8024-37-1	EC No.	84775-52-0	EINECS No.	283-882-1
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: H226. Flammable liquid and vapour Human health: Skin Irrit. 2 - H317; Eye Dam. 1 - H318; Skin Sens. 1 - H3172 - H351 Environment: Aquatic Aquatic Chronic 2 - H421	
2.2 Label Elements	
Label in accordance with (EC) No 1272/2008	
GHS09	GHS07
GHS02	GHS08
	
	
Signal Word	Warning.
Contains	
Hazard Statements	
H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H411 Toxic to aquatic life with long lasting effects.	

Precautionary Statements
P210 Keep away from heat/sparks/open flames/hot surfaces. —No smoking. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor, physician.

Supplementary Precautionary Statements

2.3 Other Hazards

PBT or vPvB according to Annex XIII	No additional data available.
Adverse physio-chemical properties	No additional data available.
Adverse effects on human health	No additional data available.

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

<= 10,00 % Alpha phellandrene CAS : 99-83-2 EINECS : 202-792-5 Classification (EC 1272/2008) Flam. Liq. 3, H226; Asp. Tox. 1, H304
<= 6,00 % Cineol 1,8 (Eucalyptol) CAS : 470-82-6 EINECS : 207-431-5 Classification (EC 1272/2008) Flam. Liq. 3, H226
<= 6,00 % Para cymene CAS : 99-87-6 EINECS : 202-796-7 Classification (EC 1272/2008) Flam. Liq. 3, H226; Aquatic Chronic 2, H411
<= 2,00 % Beta bisabolene CAS : 495-61-4 N°EINECS Classification (EC 1272/2008) Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317
<= 1,00 % Alpha pinene CAS : 80-56-8 EINECS : 201-291-9 Classification (EC 1272/2008) Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Sens. 1, H317; Aquatic Acute 1, Aquatic Chronic 1, H410
<= 1,00 % Beta caryophyllene CAS : 87-44-5 EINECS : 201-746-1 Classification (EC 1272/2008) Asp. Tox. 1, H304
<= 1,00 % Terpinolene CAS : 586-62-9 209-578-0 EINECS : 209-578-0 Classification (EC 1272/2008) Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411
<= 0,50 % Myrcene CAS : 123-35-3 EINECS : 204-622-5 Classification (EC 1272/2008) Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 3, H412
<= 10,00 % Alpha phellandrene CAS : 99-83-2 EINECS : 202-792-5 Classification (EC 1272/2008) Xn, R65
<= 6,00 % Cineol 1,8 (Eucalyptol) CAS : 470-82-6 EINECS : 207-431-5 Classification (EC 1272/2008) R10
<= 6,00 % Para cymene CAS : 99-87-6 EINECS : 202-796-7 Classification (EC 1272/2008) N, Xn, R51/53, R65
<= 2,00 % Beta bisabolene CAS : 495-61-4 N°EINECS Classification (EC 1272/2008) Xn, R38, R43, R65
<= 1,00 % Alpha pinene CAS : 80-56-8 EINECS : 201-291-9 Classification (EC 1272/2008) 80-56-8 EINECS : 201-291-9
<= 1,00 % Beta caryophyllene CAS : 87-44-5 EINECS : 201-746- Classification (EC 1272/2008) Xn, R65
<= 1,00 % Terpinolene 586-62-9 EINECS : 209-578-0 Classification (EC 1272/2008) Xn, R51/53, R65
<= 0,50 % Myrcene CAS : 123-35-3 EINECS : 204-622-5 Classification (EC 1272/2008) Xn, R52/53, R65

04. FIRST AID MEASURES

4.1	Description of first aid measures
Inhalation	Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist. Do not induce vomiting.
Skin Contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
Eye Contact	Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
4.2	Most important symptoms and effects, both acute and delayed
	No additional data available.
4.3	Indication of any immediate medical attention and special treatment needed
	No additional data available.

05. FIRE-FIGHTING MEASURES

5.1	Extinguishing Media
	Do not use a direct stream of water to extinguish. Use: Powder. Carbon dioxide (CO ₂).
5.2	Special hazards arising from the product
	Specific hazards: When heated and in case of fire, toxic vapours/gases may be formed.
5.3	Advice for firefighters
	Protective equipment for fire-fighters: Wear Self-contained breathing apparatus. Wear chemical protective clothing.


06. ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment and emergency procedures
	Wear protective clothing as described in Section 8 of this safety data sheet.
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.
	Absorb with inert, non-combustible, inorganic absorbent material, sweep up and remove to an approved disposal container. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking.
6.4	Reference to other sections
	No additional data available.

07. HANDLING AND STORAGE

7.1	Precautions for safe handling
	Avoid spilling, skin and eye contact. Adopt best manual handling considerations when handling, carrying and dispensing.
7.2	Conditions for safe storage, including any incompatibilities
	Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Keep away from heat, sparks and open flame
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(s). EUGENOL (CAS: 97-53-0) Ingredient Comments: WEL = Workplace Exposure Limits	
8.2 Exposure controls	
Protective Equipment	
	
Process Conditions	Safety shower and eye bath.
Engineering Measures	Provide adequate ventilation. Respiratory equipment. Self-contained breathing apparatus.
Respiratory Equipment	Protection not required if good ventilation is maintained. Use inhalation protection in poorly ventilated areas.
Hand Protection	Use suitable protective gloves if risk of skin contact.
Eye Protection	Wear approved safety goggles.
Other Protection	Wear rubber apron.
Hygiene Measures	Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
Personal Protection	Use personal protection according to Directive 89/686/EEC.
Skin Protection	Wear apron or protective clothing in case of splashes.
Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorised companies.

09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Liquid
Colour	Pale to dark Yellow
Odour	Fresh, Spicy and Woody
Relative Density	0.925 – 0.945 @ 20°C
Flash Point (°C)	>60
Refractive Index	1.483 - 1.489 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	No additional data available.
Vapour Pressure	0.05 mmHg.
Solubility in Water @20°C	1:10 v/v Ethanol 90%
Auto-ignition temperature (°C)	No additional data available
9.2 Other information	
No additional data available.	

10. STABILITY AND REACTIVITY

10.1 Reactivity
No additional data available.
10.2 Chemical stability
Stable under the recommended handling and storage conditions.
10.3 Possible hazardous reactions
No additional data available.
10.4 Conditions to Avoid
Avoid heat, sparks and open flames.
10.5 Incompatible materials
Materials To Avoid: Strong acids, alkali or oxidising agents.
10.6 Hazardous Decomposition Products
In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	Toxic Dose 1 - LD 50 4400 mg/kg (oral rat) Toxic Dose 2 - LD 50 >2000
Skin corrosion / irritation	No additional data available.
Serious eye damage / irritation	No additional data available.
Respiratory or skin sensitisation	No additional data available.
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	No additional data available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.
12.2 Persistence & degradability
Degradability: No additional data available.
12.3 Bioaccumulation Potential
Bioaccumulative potential: No data available on bioaccumulation.
12.4 Mobility in soil
No additional data available.
12.5 Results of PBT and vPvB Assessment
No additional data available.
12.6 Other adverse effects
No additional data available.

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	Not Regulated
UN No. SEA	Not Regulated
UN No. AIR	Not Regulated
14.2 UN proper shipping name	
ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S.	
14.3 Transport hazard class(es)	
ADR/RID/ADN Class:	Not Regulated
ICAO Class/Division:	Not Regulated
IMDG Class:	Not Regulated
Transport Labels	
14.4 Packing group	
IMDG Packing group	Not Regulated
ICAO Packing group	Not Regulated
14.5 Environmental hazards	
Environmentally Hazardous Substance/Marine Pollutant	
14.6 Special precautions for user	
EMS F-A-S-F	
Hazard No. (ADR) 9	
Hazard No. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances.	
Tunnel Restriction Code (E)	
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	
Other Information	None.

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.