



Material Safety Data Sheet

EU Regulation: 1907/2006

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

1.1 PRODUCT IDENTIFICATION

PRODUCT NAME	CLOVE LEAF, ESSENTIAL OIL				
BIOLOGICAL DEFINITION	EUGENIA CAROYPHYLLUS LEAF OIL IS AN ESSENTIAL OIL STEAM-DISTILLED FROM THE LEAVES OF THE CLOVE, EUGENIA CARYOPHYLLUS, MYRTACEAE.				
INCI NAME	EUGENIA CAROYPHYLLUS LEAF OIL				
SYNONYMS & TRADE NAMES	-				
INTERNAL PRODUCT CODE	K0141				
CAS-No	8015-97-2 / 8000-34-8 / 84961-50-2	EC No.	- / - / 284-638-7	EINECS No.	- / - / 284-638-7

1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

COMPANY ADDRESS	O&3 Unit 2, Athelstan Business Park, Hanwell Lane, Hutton Conyers, Ripon, HG4 5BF, England.
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1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

EMERGENCY CONTACTS	MRS. ELEANOR WADE (07968 200167)
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SECTION 2: HAZARDS IDENTIFICATION	
2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE	THE FULL TEXT FOR ALL HAZARD STATEMENTS IS DISPLAYED IN SECTION 16.
CLASSIFICATION (67/548/EEC)	NO ADDITIONAL DATA AVAILABLE.
CLASSIFICATION (EU1272/2008)	PHYSICAL AND CHEMICAL: HAZARDS NOT CLASSIFIED. HUMAN HEALTH: SKIN SENSITISATION CAT. 1 - H317, ASPIRATION TOXICITY CAT 1 - H304, SERIOUS EYE DAMAGE/ EYE IRRITATION CAT 2 – H319 ENVIRONMENT: NOT CLASSIFIED
2.2 LABEL ELEMENTS	LABEL IN ACCORDANCE WITH REGULATION (EC) No 1272/2008.
GHS LABEL	  GHS07 GHS08
SIGNAL WORD	DANGER.
CONTAINS	BETA-CARYOPHYLLENE.
HAZARDS STATEMENT	H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. H319 CAUSES SERIOUS EYE IRRITATION.
SIGNAL WORD	DANGER.
PRECAUTIONARY STATEMENTS	P261 AVOID BREATHING VAPOURS/SPRAY. P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. P301+P310 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER/DOCTOR. P302+P352 IF ON SKIN: WASH WITH PLENTY OF WATER. P305+P351+P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. P331 Do NOT INDUCE VOMITING. P333+P313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION. P337+P313 IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION.
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	P264 WASH HANDS AND EXPOSED SKIN THOROUGHLY AFTER HANDLING..
SECTION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.	
2.3 OTHER HAZARDS	
ADVERSE PHYSIO-CHEMICAL PROPERTIES	NO ADDITIONAL DATA AVAILABLE.
ADVERSE EFFECTS ON HUMAN HEALTH	NO ADDITIONAL DATA AVAILABLE.
PBT OR vPvB ACCORDING TO ANNEX XIII	NO ADDITIONAL DATA AVAILABLE.
SECTION 3: COMPOSITION OF INGREDIENTS	



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3.1 MIXTURES	≤ 92.0% EUGENOL CAS No: 97-53-0 EC No: 202-589-1 CLASSIFICATION (EC 1272/2008) SKIN SENS. 1B H317, EYE IRRIT. 2 H319
	10.0 – 25% BETA-CARYOPHYLLENE CAS No: 87-44-5 EC No: 201-746-1 CLASSIFICATION (EC 1272/2008) Asp. Tox. 1 H304, SKIN SENS. 1B H317, AQUATIC CHRONIC 4 H413
	≤ 2.5% EUGENYL ACETATE CAS No: 93-28-7 EC No: 202-235-6 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4 H302
	≤ 0.3% ISOEUGENOL CAS No: 97-54-1 EC No: 202-590-7 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4 H302, ACUTE TOX. 4 H312, SKIN IRRIT. 2 H315, SKIN SENS. 1 H317, EYE IRRIT. 2 H319
	≤ 0.3% METHYL EUGENOL CAS No: 93-15-2 EC No: 202-223-0 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4 H302, MUTA. 2 H341, CARC. 2 H351

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES	
GENERAL INFORMATION	ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.
INHALATION	GET MEDICAL ATTENTION IMMEDIATELY. REMOVE FROM EXPOSURE SITE TO FRESH AIR, KEEP AT REST, AND OBTAIN MEDICAL ATTENTION.
INGESTION	GET MEDICAL ATTENTION IMMEDIATELY. IMMEDIATELY CALL THE DOCTOR. RINSE MOUTH WITH WATER AND OBTAIN MEDICAL ATTENTION.
SKIN CONTACT	REMOVE CONTAMINATED CLOTHES. WASH THOROUGHLY WITH SOAP AND WATER. CONTACT PHYSICIAN IF IRRITATION PERSISTS.
EYE CONTACT	FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. CONTACT PHYSICIAN IF SYMPTOMS PERSIST.
4.2 MOST IMPORTANT SYMPTOMS & EFFECTS (ACUTE & DELAYED)	NO ADDITIONAL DATA AVAILABLE
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	TREAT SYMPTOMATICALLY.

SECTION 5: FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MATERIAL	FOAM, CO ₂ , DRY CHEMICAL POWDER.
5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	A FIRE WILL OFTEN PRODUCE A THICK BLACK SMOKE. EXPOSURE TO DECOMPOSITION PRODUCTS MAY BE HAZARDOUS TO HEALTH. DO NOT BREATHE IN SMOKE. THERMAL DECOMPOSITION OR COMBUSTION PRODUCTS MAY INCLUDE THE FOLLOWING SUBSTANCES: CARBON DIOXIDE (CO ₂), CARBON MONOXIDE (CO), OTHER TOXIC GASES. CONTAINERS CLOSE TO FIRE SHOULD BE REMOVED OR COOLED WITH WATER.
5.3 ADVICE FOR FIRE-FIGHTERS	AVOID INHALATION OF GENERATED FUMES OR VAPOURS. WEAR SELF-CONTAINED BREATHING APPARATUS AND APPROPRIATE PROTECTIVE CLOTHING.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS	ENSURE ADEQUATE VENTILATION OF THE WORKING AREA, EVACUATE PERSONNEL TO SAFE AREA, WEAR SUITABLE PROTECTIVE EQUIPMENT. NO SMOKING, SPARKS, FLAMES OR OTHER SOURCES OF IGNITION NEAR SPILLAGE. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. AVOID INHALATION.
6.2 ENVIRONMENTAL PRECAUTIONS	DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES.
6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING UP	REMOVE IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. AVOID EXCESSIVE INHALATION OF VAPOURS. CONTAIN SPILLAGE IMMEDIATELY BY USE OF SAND OR INERT POWDER. DISPOSE OF ACCORDING TO LOCAL REGULATIONS. COVER WITH AN INERT, INORGANIC, NON-COMBUSTIBLE ABSORBENT MATERIAL (E.G DRY-LIME, SAND, SODA ASH).

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6.4 REFERENCES TO OTHER SECTIONS	REFER & CONSIDER SECTIONS 4,7,8 & 13.
SECTION 7: HANDLING & STORAGE	
7.1 PRECAUTIONS FOR SAFE-HANDLING	HANDLE IN ACCORDANCE WITH GOOD HYGIENE AND SAFETY PRACTICE. KEEP AWAY FROM HEAT, SPARKS, OPEN FLAMES AND HOT SURFACES. - NO SMOKING. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. USE IN ACCORDANCE WITH GOOD MANUFACTURING AND INDUSTRIAL HYGIENE PRACTICES. USE IN AREAS WITH ADEQUATE VENTILATION DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
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)	THE INFORMATION REQUIRED IS CONTAINED IN THIS MATERIAL SAFETY DATA
SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION	
8.1 CONTROL PARAMETERS	NO DATA.
8.2 EXPOSURE CONTROLS	
 	
EYE PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION. AVOID CONTACT WITH EYES. WEAR APPROVED SAFETY GOGGLES. (EN166)
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.
RESPIRATORY EQUIPMENT	DO NOT INHALE GASES / FUMES / AEROSOLS. CERTIFIED RESPIRATORY PROTECTIVE DEVICE RECOMMENDED.
HYGIENE MEASURES	GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.
ENGINEERING MEASURES	NONE.
SKIN PROTECTION	WEAR PROTECTIVE CLOTHING TO REDUCE THE RISK OF SKIN AND EYE CONTACT.
PERSONAL PROTECTION	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES. AVOID CONTACT WITH SKIN AND EYES. USE PERSONAL PROTECTION ACCORDING TO DIRECTIVE 89/686/EEC.
OTHER PROTECTION	WEAR SUITABLE PROTECTION TO AVOID CONTACT WITH SKIN AND EYES. DO NOT INHALE VAPOURS.
PROCESS CONDITIONS	ENSURE AREA IS WELL VENTILATED. AVOID VAPOUR INHALATION. SAFETY SHOWER & EYE BATH.
ENVIROMENTAL EXPOSURE CONTROLS	AVOID DISCHARGING INTO DRAINAGE WATER.
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES	
9.1 PHYSICAL & CHEMICAL PROPERTIES	
APPEARANCE	LIMPID LIQUID
COLOUR	PALE YELLOW
ODOUR	CHARACTERISTIC OF CLOVE.
RELATIVE DENSITY @ 20°C	APPROX. 1.044 @ 20°C

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FLASH POINT (°C)	112°C.
REFRACTIVE INDEX @ 20 °C	APPROX. 1.553 @ 20°C
SOLUBILITY IN WATER @ 20 °C	NO DATA.
9.2 OTHER INFORMATION	NO DATA.
SECTION 10: STABILITY & REACTIVITY	
10.1 REACTIVITY	STABLE.
10.2 CHEMICAL STABILITY	STABLE UNDER SUGGESTED STORAGE CONDITIONS (<15°C). STABLE UNDER NORMAL CONDITIONS.
10.3 POSSIBILITY OF HAZARDOUS REACTIONS	NONE UNDER NORMAL PROCESSING.
10.4 CONDITIONS TO AVOID	STORAGE AT HIGH TEMPERATURES. DO NOT STORE ABOVE 15°C. AVOID HEAT, FLAMES AND OTHER SOURCES OF IGNITION.
10.5 INCOMPATIBLE MATERIALS	AVOID CONCENTRATED ACIDS, ALKALIS & OXIDISING AGENTS.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS	THIS PRODUCT DOES NOT DECOMPOSE UNDER NORMAL CONDITIONS. UNDER FIRE CONDITIONS THE PRODUCT WILL PRODUCE A MIXTURE OF IRRITATING FUMES & SMOKE & CARBON MONOXIDE.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	NOT CLASSIFIED
SKIN IRRITATION	NOT CLASSIFIED
EYE DAMAGE OR IRRITATION	MAY CAUSE SERIOUS EYE IRRITATION
RESPIRATORY OR SKIN SENSITIVITY	SKIN – 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.
OTHER INFORMATION	NO ADDITIONAL DATA AVAILABLE.

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY	NOT CLASSIFIED. LOW TOXICITY TO INVERTEBRATES, FISH AND ALGAE.
12.2 PERSISTENCE & DEGRADABILITY	NO DATA.
12.3 BIO- ACCUMULATIVE POTENTIAL	NO DATA.
12.4 MOBILITY IN SOIL	NO DATA
12.5	NO DATA.

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RESULTS OF PBT & VPVB ASSESSMENT	
12.6	NO DATA.
OTHER ADVERSE EFFECTS	

SECTION 13: DISPOSAL INFORMATION

13.1 WASTE TREATMENT METHODS	DO NOT ALLOW ENTRY INTO DRAINS OR WATERWAYS. WASTE: WASTE MANAGEMENT IS CARRIED OUT WITHOUT ENDANGERING HUMAN HEALTH, WITHOUT HARMING THE ENVIRONMENT AND, IN PARTICULAR WITHOUT RISK TO WATER, AIR, SOIL, PLANTS OR ANIMALS. RECYCLE OR DISPOSE OF WASTE IN COMPLIANCE WITH CURRENT LEGISLATION, PREFERABLY VIA A CERTIFIED COLLECTOR OR COMPANY. DO NOT CONTAMINATE THE GROUND OR WATER WITH WASTE. DO NOT DISPOSE OF WASTE INTO THE ENVIRONMENT.
	SOILED PACKAGING: EMPTY CONTAINER COMPLETELY. KEEP LABEL(S) ON CONTAINER. DISPOSE OF VIA A CERTIFIED DISPOSAL CONTRACTOR.

SECTION 14: TRANSPORT INFORMATION

14.1 TRANSPORT INFORMATION	
	UN NUMBER
	NOT CLASSIFIED.
14.2 UN SHIPPING NAME	NONE.
14.3 TRANSPORT HAZARD CLASS(ES)	NONE.
14.4 PACKING GROUP	NONE.
14.5 ENVIROMENTAL HAZARDS	NO ADDITIONAL DATA.
14.6 SPECIAL PRECAUTIONS FOR USER	SEE SECTIONS 6-8.
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	NONE.

SECTION 15: REGULATORY INFORMATION

15.1 PRODUCT SPECIFIC SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS & LEGISLATION	
EU DIRECTIVES	REGULATION (EC) NO 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 TH DECEMBER 2006. CONCERNING THE REGISTRATION, EVALUATION, AUTHORIZATION & RESTRICTION OF CHEMICALS (REACH), ESTABLISHING A EUROPEAN CHEMICALS AGENCY, AMENDING DIRECTIVE 1999/45/EC AND REPEALING COUNCIL REGULATION (EEC) NO793/93 & COMMISSION REGULATION (EC) NO1488/94 AS WELL AS COUNCIL DIRECTIVE 76/769/EEC & COMMISSION DIRECTIVE 91/155/ECC, 93/67/ECC, 93/105/EEC & 2000/21/EC (INCLUDING AMENDMENTS).
STATUTORY INSTRUMENTS	THE CHEMICALS (HAZARD INFORMATION & PACKAGING FOR SUPPLY REGULATIONS 2009 (S.I.2009 NO 716).
APPROVED CODE OF PRACTICE	CLASSIFICATION & LABELLING OF SUBSTANCES & PREPARATIONS DANGEROUS FOR SUPPLY. SAFETY DATA

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	SHEETS FOR SUBSTANCES & PREPARATIONS.
GUIDANCE NOTES	WORKPLACE EXPOSURE LIMITS EH40. CHIP FOR EVERYONE HSG 108.
15.2 CHEMICAL SAFETY ASSESSMENT	AN ASSESSMENT HAS NOT BEEN EXECUTED AS THIS IS NOT A HAZARDOUS MATERIAL ACCORDING TO ARTICLE 31 OF REACH 1907/2006.

SECTION 16: OTHER INFORMATION

HAZARD AND/ OR PRECAUTIONARY STATEMENTS IN FULL	H302 HARMFUL IF SWALLOWED. H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H312 HARMFUL IN CONTACT WITH SKIN. H315 CAUSES SKIN IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. H319 CAUSES SERIOUS EYE IRRITATION. H341 SUSPECTED OF CAUSING GENETIC DEFECTS. H351 SUSPECTED OF CAUSING CANCER. H413 MAY CAUSE LONG LASTING HARMFUL EFFECTS TO AQUATIC LIFE.
TRAINING INSTRUCTIONS: REFER TO POSSIBLE HAZARD BEFORE USE OF THIS PRODUCT.	
ABBREVIATIONS & ACRONYMS:	
MSDS	MATERIAL SAFETY DATA SHEET.
INCI	INTERNATIONAL NOMENCLATURE OF COSMETIC INGREDIENTS.
CAS	CHEMICAL ABSTRACT SERVICE.
IMDG	INTERNATIONAL MARITIME CODE FOR DANGEROUS GOODS.
ADR	ACCORD EUROPEAN SUR LE TRANSPORT DES MARCHANDISES DANGEREUSES PAR ROUTE (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD).
RID	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY RAIL.
ICAO	INTERNATIONAL CIVIL AVIATION ORGANIZATION.
ADN	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS.
GHS	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION & LABELLING OF CHEMICALS.
TREM CARD	TRANSPORT EMERGENCY CARD.
STOT	SPECIFIC TARGET ORGAN TOXICITY.

DOCUMENTATION REVISION

DATE	CHANGE DESCRIPTION
10 TH APRIL 2018	DATA LAUNCH
JANUARY 2021	REVIEW

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