

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 BUD, ESSENTIAL OIL ORGANIC				
BIOLOGICAL DEFINITION	EUGENIA CARYOPHYLLUS BUD OIL IS AN ESSENTIAL OIL STEAM-DISTILLED FROM THE DRIED FLOWER BUDS OF THE CLOVE, SYZYGIUM AROMATICUM, SYN. EUGENIA CARYOPHYLLUS, MYRTACEAE. IT CONTAINS EUGENOL (82-87% INCLUDING ABOUT 10% ACETYLEUGENOL), CARYOPHYLLENE				
INCI NAME	EUGENIA CARYOPHYLLUS BUD OIL				
Synonyms & Trade Names	-				
INTERNAL PRODUCT CODE	K0140				
CAS-No	84961-50-2 EC No. 284-638-7 EINECS No. 284-638-7				
1.2 Details of the supplier of the safety data sheet					
	Bomar Ltd				
COMPANY ADDRESS	Sea Road, Kilcoole, Co.Wicklow, Ireland				
EMAIL	info@bomar.ie				
1.3 Details of the supplier of the safety data sheet					
Emergency Contacts	John Byrne 012875110				



SECTION 2: HAZARDS IDENTIFICATIO	N
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)	Eye irritation, Category 2 (Eye Irrit. 2, H319). Skin sensitisation, Category 1 (Skin Sens. 1, H317). Germ cell mutagenicity, Category 2 (Muta. 2, H341). Carcinogenicity, Category 1B (Carc. 1B, H350). Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412). This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
2.2 Label Elements	LABEL IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.
GHS LABEL	GHS07 GHS08
Signal Word	Danger.
Contains	EC 283-479-0 CINNAMON LEAF OIL
Hazards Statement	H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H341 Suspected of causing genetic defects. H412 Harmful to aquatic life with long lasting effects.
Signal Word	Danger.
Precautionary Statements	 P273 Avoid Release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and 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. P333 + P313 IF skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse.

WWW.Bomar.IE



SUPPLEMENTARY PRECAUTIONARY STATEMENTS	None.		
SECT	TION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.		
2.3 Other Hazards			
ADVERSE PHYSIO-CHEMICAL PROPERTIES	NO DATA.		
Adverse effects on human health	THE MIXTURE DOES NOT CONTAIN SUBSTANCES CLASSIFIED AS 'SUBSTANCES OF VERY HIGH CONCERN' (SVHC) >= 0.1% published by the European CHEMICALS AGENCY (ECHA) UNDER ARTICLE 57 OF REACH: http://echa.europa.eu/fr/candidate-list- TABLE		
PBT or vPvB according to Annex XIII	THE MIXTURE SATISFIES NEITHER THE PBT NOR THE VPVB CRITERIA FOR MIXTURES IN ACCORDANCE WITH ANNEXE XIII OF THE REACH REGULATIONS EC 1907/2006.		
SECTION 3: COMPOSITION OF INGRE	EDIENTS		
3.1 Mixtures	< 87.0% EUGENOL CAS-No: 97-53-0 EC No: 202-589-1 Classification (EC 1272/2008) GHS07, Warning, Aquatic Acute 2 (H401) Skin Sens. 1 (H317) Eye Irrit. 1 (H319), Skin Irrit. 3 (H316) Acute Tox. 5 (H303), Aquatic Acute 2 (H401) (EFFA), Skin Sens. 1 (H317) (EFFA) Eye Irrit. 1 (H319) (EFFA) Skin Irrit. 3 (316) (EFFA), Acute Tox. 5 (H303)(EFFA) < 5.0% Eugenyl Acetate CAS: 93-28-7 EC No: 202-235-6 Classification (EC 1272/2008) GHS07, Warning, Acute Tox. 4, H302 < 0.1% Methyl Eugenol (Eugenyl Methyl Ether) CAS: 93-15-2 EC No: -202-223-0 Classification (EC 1272/2008) GHS07, GHS08, Warning, Acute Tox. 4, H302, Carc. 2, H351, Muta. 2, H341,		

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)	OBSERVE RISK OF ASPIRATION IF VOMITING OCCURS.
4.3	TREAT SYMPOMATICALLY.



INDICATION OF ANY IMMEDIATE MEDICAL	
ATTENTION OR SPECIAL TREATMENT REQUIRED	
SECTION 5: FIRE FIGHTING MEASURES	
5.1 Extinguishing material	FOAM, CO2, DRY CHEMICAL POWDER.
5.2 Special hazards arising from the substance Or Mixture	Burning produces irritating, toxic and obnoxious fumes
5.3	SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:
ADVICE FOR FIRE-FIGHTERS	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE
	CLOTHING.
SECTION 6: ACCIDENTAL RELEASE ME	ASURES
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).
6.4 References to other sections	REFER & CONSIDER SECTION 12.
SECTION 7: HANDLING & STORAGE	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.
PRECAUTIONS FOR SAFE-HANDLING	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	

BOMAR

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.
	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES. AVOID CONTACT WITH SKIN
PERSONAL PROTECTION	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.
9.1 Physical & Chemical Properties	
APPEARANCE	LIMPID LIQUID
COLOUR	YELLOW – DARK BROWN
ODOUR	SPICY & SWEET, CHARACTERISTIC
RELATIVE DENSITY @ 20°C	1.04
FLASH POINT (°C)	88°C.
REFRACTIVE INDEX @ 20 °C	
NERVACINE INDEX 6 20 C	1.555
Solubility in water @ 20 °C	1.555INSOLUBLE IN WATER. SOLUBLE IN 2 VOLUMES MAXIMUM OF ETHANOL 70%.
SOLUBILITY IN WATER @ 20 °C 9.2	INSOLUBLE IN WATER. SOLUBLE IN 2 VOLUMES MAXIMUM OF ETHANOL 70%.
Solubility in water @ 20 °C 9.2 Other Information	INSOLUBLE IN WATER. SOLUBLE IN 2 VOLUMES MAXIMUM OF ETHANOL 70%.
SOLUBILITY IN WATER @ 20 °C 9.2 OTHER INFORMATION SECTION 10: STABILITY & REACTIVITY 10.1	INSOLUBLE IN WATER. SOLUBLE IN 2 VOLUMES MAXIMUM OF ETHANOL 70%. Auto-ignition temperature 380°C.
SOLUBILITY IN WATER @ 20 °C 9.2 OTHER INFORMATION SECTION 10: STABILITY & REACTIVITY 10.1 REACTIVITY 10.2	INSOLUBLE IN WATER. SOLUBLE IN 2 VOLUMES MAXIMUM OF ETHANOL 70%. AUTO-IGNITION TEMPERATURE 380°C. NOT APPLICABLE. STABLE UNDER SUGGESTED STORAGE CONDITIONS (<15°C).
SOLUBILITY IN WATER @ 20 °C 9.2 OTHER INFORMATION SECTION 10: STABILITY & REACTIVITY 10.1 REACTIVITY 10.2 CHEMICAL STABILITY 10.3	INSOLUBLE IN WATER. SOLUBLE IN 2 VOLUMES MAXIMUM OF ETHANOL 70%. AUTO-IGNITION TEMPERATURE 380°C. NOT APPLICABLE. STABLE UNDER SUGGESTED STORAGE CONDITIONS (<15°C). STABLE UNDER NORMAL CONDITIONS.



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** CINNAMON LEAF OIL (CAS: 84649-98-9) ORAL ROUTE: DL50 = 2650 MG/KG ACUTE TOXICITY SPECIES : RAT (RECOMMENDED BY THE CLP) DERMAL ROUTE: DL50 > 5000 MG/KG SPECIES : RABBIT (RECOMMENDED BY THE CLP) SKIN IRRITATION MAY CAUSE ALLERGIC REACTION. MAY HAVE REVERSIBLE EFFECTS ON THE EYES, SUCH AS EYE IRRITATION WHICH IS TOTALLY EYE DAMAGE OR IRRITATION REVERSIBLE BY THE END OF OBSERVATION AT 21 DAYS. RESPIRATORY OR SKIN SENSITIVITY NO DATA. CAUSE FOR CONCERN OWING TO THE POSSIBILITY THAT IT MAY INDUCE HERITABLE GERM CELL MUTAGENICITY MUTATIONS IN THE GERM CELLS OF HUMANS. CARCINOGENICITY PRESUMED HUMAN CARCINOGEN REPRODUCTIVE TOXICITY NO DATA. STOT - SINGLE EXPOSURE NO DATA. STOT - REPEATED EXPOSURE NO DATA. ASPIRATION HAZARD NO DATA. OTHER INFORMATION NO DATA. SECTION 12: ECOLOGICAL INFORMATION HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS. THE PRODUCT MUST NOT BE ALLOWED TO RUN INTO DRAINS OR WATERWAYS. SUBSTANCES CLASSIFIED AS CATEGORY 1 ACUTE TOXICITY: CRUSTACEAN TOXICITY: DURATION OF EXPOSURE : 48 H 12.1 CE50 = 1.61 MG/LΤΟΧΙCΙΤΥ SPECIES: DAPHNIA SP. OECD GUIDELINE 202 (DAPHNIA SP. ACUTE IMMOBILISATION TEST) 12.2 **PERSISTENCE & DEGRADABILITY** NO DATA. 12.3 NO DATA. **BIO-ACCUMULATIVE POTENTIAL** 12.4 ΝΟ ΠΑΤΑ MOBILITY IN SOIL 12.5 NO DATA. **RESULTS OF PBT & VPVB ASSESSMENT** 12.6 NO DATA.



OTHER ADVERSE EFFECTS	
SECTION 13: DISPOSAL INFORMATION	
13.1 Waste treatment methods	ALWAYS RECOVER SPILLED PRODUCT. DISCARD WASTE MATERIAL WITH AUTHORIZED WASTE MANAGEMENT SERVICES. ACT IN ACCORDANCE WITH LOCAL & NATIONAL WASTE REGULATIONS.

SECTION 14: TRANSPORT INFORMATION	
14.1	
TRANSPORT INFORMATION	
UN NUMBER	NOT CLASSIFIED.
14.2	None.
UN SHIPPING NAME	
14.3	None.
TRANSPORT HAZARD CLASS(ES)	
14.4	None.
PACKING GROUP	
14.5	NO ADDITIONAL DATA.
14.5 Enviromental Hazards	
I4.6	
SPECIAL PRECAUTIONS FOR USER	SEE SECTIONS 6-8.
14.7	
TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 &	None.
THE IBC CODE.	TVOINE.
SECTION 15: REGULATORY INFORMATION	
SECTION 15. REGULATORT INFORMATION	
15.1	
PRODUCT SPECIFIC SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS	
& LEGISLATION	
	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
EU DIRECTIVES	
EU DIRECTIVES	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.
AFFROVED CODE OF I RACTICE	SAFETY DATA SHEETS FOR SUBSTANCES & PREPARATIONS.
GUIDANCE NOTES	WORKPLACE EXPOSURE LIMITS EH40. CHIP FOR EVERYONE HSG 108.
15.2	AN ASSESSMENT HAS NOT BEEN EXECUTED AS THIS IS NOT A HAZARDOUS MATERIAL
CHEMICAL SAFETY ASSESSMENT	ACCORDING TO ARTICLE 31 OF REACH 1907/2006.

SECTION 16: OTHER INFORMATION	
	H317 MAY CAUSE AN ALLERGIC SKIN REACTION.
	H319 Causes serious eye irritation.
HAZARD AND/ OR PRECAUTIONARY STATEMENTS IN FULL	H341 SUSPECTED OF CAUSING GENETIC DEFECTS.
	H350 May cause cancer.
	H412 HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
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.
	ACCORD EUROPEAN SUR LE TRANSPORT DES MERCHANDISES DANGEREUSES PAR ROUTE
ADR	(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 [™] April 2018	DATA LAUNCH