

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	Frankincense (Boswellia Carterii), Essential Oil				
BIOLOGICAL DEFINITION	BOSWELLIA CARTERII OIL IS THE VOLATILE OIL OBTAINED FROM THE BOSWELLIA CARTERII, BURSERACEAE.				
INCI NAME	BOSWELLIA CARTERII OIL				
SYNONYMS & TRADE NAMES	FRANKINCENSE OIL				
INTERNAL PRODUCT CODE	ко190				
CAS-No	89957-98-2 / 8050-07-5	EC No.	289-620-2 / 232-474-1	EINECS No.	289-620-2 / 232-474-1
	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.				
EMAIL	ThomasKerfoot@Oand3.com				
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
EMERGENCY CONTACTS	MRS. ELEANOR WADE (07968 200167)				

SECTION 2: HAZARDS IDENTIFICATION		
2.1	THE FIRM TEXT FOR ALL HATARD STATEMENTS IS DISNIAND IN SECTION 14	
CLASSIFICATION OF THE SUBSTANCE OR MIXTURE CLASSIFICATION (67/548/EEC)	THE FULL TEXT FOR ALL HAZARD STATEMENTS IS DISPLAYED IN SECTION 16. NO ADDITIONAL DATA AVAILABLE.	
CLASSIFICATION (EU1272/2008)	FLAMMABLE LIQUID, CATEGORY 3 (FLAM. LIQ. 3, H226). SKIN IRRITATION, CATEGORY 2 (SKIN IRRIT. 2, H315). SKIN SENSITISATION, CATEGORY 1B (SKIN SENS. 1B, H317). HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD, CATEGORY 2 (AQUATIC CHRONIC 2, H411).	
2.2 LABEL ELEMENTS	LABEL IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.	
GHS LABEL	GHS07 GHS02 GHS09	
SIGNAL WORD	WARNING.	
Contains	EC 201-291-9 ALPHA-PINENE EC 242-060-2 L-BETA-PINENE 601-029-00-7 (R)-P-MENTHA-1,8-DIENE	
HAZARDS STATEMENT	H226 FLAMMABLE LIQUID AND VAPOUR. H315 CAUSES SKIN IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. 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. P321 SPECIFIC TREATMENT (SEE ON THIS LABEL). P333 + P313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION. P363 WASH CONTAMINATED CLOTHING BEFORE REUSE. P391 COLLECT SPILLAGE.	
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	None.	
	SECTION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.	
2.3 OTHER HAZARDS		
Adverse Physio-Chemical properties	NO DATA.	
Adverse effects on human health	NO DATA.	
PBT OR VPVB ACCORDING TO ANNEX XIII	THE MIXTURE DOES NOT CONTAIN ANY SUBSTANCES CLASSIFIED AS 'SUBSTANCES OF VERY HIGH CONCERN' (SVHC) BY THE EUROPEAN CHEMICALS AGENCY (ECHA) UNDER ARTICLE 57 OF REACH: HTTP://ECHA.EUROPA.EU/FR/CANDIDATE-LIST-TABLE. 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 INGREDIENTS		
3.1 Substances	25.0 - 50.0% ALPHA-PINENE CAS-No.: 80-56-8 EC No201-291-9 CLASSIFICATION (EC 1272/2008) GHS08, GHS02, GHS07, DGR, ASP. TOX. 1, H304, FLAM. LIQ. 3, H226, SKIN IRRIT. 2, H315, SKIN SENS. 1B, H317 10.0 - 25.0% L-BETA-PINENE CAS-No.: 18172-67-3 EC No. 242-060-2 CLASSIFICATION (EC 1272/2008) GHS08, GHS02, GHS07, DGR, ASP. TOX. 1, H304, FLAM. LIQ. 3, H226, SKIN IRRIT. 2, H315, SKIN SENS. 1B, H317	

10.0 - 25.0% (R)-P-MENTHA-1,8-DIENE CAS-No.: 5989-27-5 EC No: 227-813-5
CLASSIFICATION (EC 1272/2008) GHS02, GHS07, GHS09, WNG, FLAM. LIQ. 3, H226, SKIN IRRIT. 2, H315, SKIN
SENS. 1, H317, AQUATIC ACUTE 1, H400, M ACUTE = 1, AQUATIC CHRONIC 1, H410, M CHRONIC = 1
10.0 - 25.0% PARA-CYMENE CAS-No.: 99-87-6 EC No: 202-796-7 CLASSIFICATION (EC 1272/2008) GHS08, GHS02, GHS09, DGR, ASP. TOX. 1, H304, FLAM. LIQ. 3, H226, AQUATIC CHRONIC 2, H411
2.5 - 10.0% BETA-CARYOPHYLLENE CAS-No.: 87-44-5 EC No: 201-746-1 CLASSIFICATION (EC 1272/2008) GHS08, DGR, ASP. TOX. 1, H304
2.5 - 10.0% MYRCENE CAS-No.: 123-35-3 EC No: 204-622-5 CLASSIFICATION (EC 1272/2008) GHS08, GHS02, GHS07, DGR, ASP. TOX. 1, H304, EYE IRRIT. 2, H319, FLAM. LIQ. 3, H226, SKIN IRRIT. 2, H315

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)	SYMPTOMS CONTACT: MAY CAUSE AN ALLERGIC REACTION
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	TREAT SYMTOMATICALLY.

5.1	FLAMMABLE.
XTINGUISHING MATERIAL	CHEMICAL POWDERS, CARBON DIOXIDE AND OTHER EXTINGUISHING GAS ARE SUITABLE FOR SMALL FIRES.
	KEEP PACKAGES NEAR THE FIRE COOL, TO PREVENT PRESSURISED CONTAINERS FROM BURSTING.
	IN THE EVENT OF A FIRE, USE:
	- SPRAYED WATER OR WATER MIST
	- WATER WITH AFFF (AQUEOUS FILM FORMING FOAM) ADDITIVE
	- HALON
	- FOAM
	- MULTIPURPOSE ABC POWDER
	- BC POWDER
	- CARBON DIOXIDE (CO2)
	PREVENT THE EFFLUENT OF FIRE-FIGHTING MEASURES FROM ENTERING DRAINS OR WATERWAYS.
	In the event of a fire, do not use:
	- WATER JET
5.2	
PECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	BURNING PRODUCES IRRITATING, TOXIC AND OBNOXIOUS FUMES
.3	SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:
ADVICE FOR FIRE-FIGHTERS	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING.

ENSURE ADEQUATE VENTILATION OF THE WORKING AREA, EVACUATE PERSONNEL TO SAFE AREA, WEAR SUITABLE PROTECTIVE

6.1

PERSONAL PRECAUTIONS	EQUIPMENT. NO SMOKING, SPARKS, FLAMES OR OTHER SOURCES OF IGNITION NEAR SPILLAGE. AVOID CONTACT WITH SKIN,
	EYES AND CLOTHING. AVOID INHALATION.
6.2	DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY
ENVIRONMENTAL PRECAUTIONS	GUIDELINES.
6.3	REMOVE IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. AVOID EXCESSIVE INHALATION OF VAPOURS. CONTAIN
METHODS & MATERIAL FOR CONTAINMENT AND CLEANING	SPILLAGE IMMEDIATELY BY USE OF SAND OR INERT POWDER. DISPOSE OF ACCORDING TO LOCAL REGULATIONS. COVER WITH
UP	AN INERT, INORGANIC, NON-COMBUSTIBLE ABSORBENT MATERIAL (E.G DRY-LIME, SAND, SODA ASH).
6.4	REFER & CONSIDER SECTION 12.
REFERENCES TO OTHER SECTIONS	RELET & CONSIDER SECTION 12.

SECTION 7: HANDLING & STORAGE

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.

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 DATA

SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 **CONTROL PARAMETERS** OCCUPATIONAL EXPOSURE LIMITS:

- ACGIH TLV (AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS, THRESHOLD LIMIT VALUES, 2010): CAS TWA STEL CEILING DEFINITION CRITERIA

80-56-8 20 PPM --

EXPOSURE CONTROLS



EYE PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION. AVOID CONTACT WITH EYES. WEAR APPROVED SAFETY	
	GOGGLES. (EN166)	
	AVOID CONTACT WITH SKIN. WASH HANDS BEFORE BREAKS AND AT END OF WORK. WEAR PROTECTIVE GLOVES. DIN/EN	
HAND PROTECTION	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	LIQUID
COLOUR	Pale Yellow
ODOUR	CHARACTERISTIC
RELATIVE DENSITY @ 20°C	0.860 – 0.895
Flash Point (°C)	36 °C.
Refractive Index @ 20 °C	1.44 – 1.480
SOLUBILITY IN WATER @ 20 °C	INSOLUBLE IN WATER.
9.2 OTHER INFORMATION	VAPOUR PRESSURE: BETWEEN 175 KPA AND 300 KPA INCLUSIVE.

SECTION 10: STABILITY & REACTIVITY

10.1 REACTIVITY	NOT APPLICABLE.
10.2 CHEMICAL STABILITY	Stable under suggested storage conditions (<15°C).
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	PARA-CYMENE (CAS: 99-87-6) ORAL ROUTE : LD50 = 4750 MG/KG ALPHA-PINENE (CAS: 80-56-8) ORAL ROUTE : LD50 = 3500 MG/KG
Skin irritation	MAY CAUSE IRREVERSIBLE DAMAGE TO THE SKIN; NAMELY INFLAMMATION OF THE SKIN OR THE FORMATION OF ERYTHEMA AND ESCHAR OR OEDEMA FOLLOWING EXPOSURE UP TO FOUR HOURS. REPEATED OR PROLONGED CONTACT WITH THE MIXTURE MAY CAUSE REMOVAL OF NATURAL OIL FROM THE SKIN RESULTING IN NON-ALLERGIC CONTACT DERMATITIS AND ABSORPTION THROUGH THE SKIN. MAY CAUSE AN ALLERGIC REACTION BY SKIN CONTACT.
EYE DAMAGE OR IRRITATION	SPLASHES IN THE EYES MAY CAUSE IRRITATION AND REVERSIBLE DAMAGE.
Respiratory or skin sensitivity	EXPOSURE TO VAPOURS FROM SOLVENTS IN THE MIXTURE IN EXCESS OF THE STATED OCCUPATIONAL EXPOSURE LIMIT MAY RESULT IN ADVERSE HEALTH EFFECTS SUCH AS MUCOUS MEMBRANE AND RESPIRATORY SYSTEM IRRITATION AND ADVERSE EFFECTS ON KIDNEY, LIVER AND CENTRAL NERVOUS SYSTEM. SYMPTOMS PRODUCED WILL INCLUDE HEADACHES, NUMBNESS, DIZZINESS, FATIGUE, MUSCULAR ASTHENIA AND, IN EXTREME CASES, LOSS OF CONSCIOUSNESS.
GERM CELL MUTAGENICITY	NO DATA.
Carcinogenicity	MONOGRAPH(S) FROM THE IARC (INTERNATIONAL AGENCY FOR RESEARCH ON CANCER): CAS 5989-27-5: IARC GROUP 3: THE AGENT IS NOT CLASSIFIABLE AS TO ITS CARCINOGENICITY TO HUMANS.

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		
12.1	TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.	
TOXICITY	THE PRODUCT MUST NOT BE ALLOWED TO RUN INTO DRAINS OR WATERWAYS.	
12.2 PERSISTENCE & DEGRADABILITY	NO DATA.	
12.3 BIO- ACCUMULATIVE POTENTIAL	NO DATA	
12.4 MOBILITY IN SOIL	NO DATA	
12.5 RESULTS OF PBT & VPVB ASSESSMENT	NO DATA.	
12.6 OTHER ADVERSE EFFECTS	NO DATA.	
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	ROAD: UN 1169 SEA: UN 1169 AIR: UN 1169	
14.2 UN SHIPPING NAME	EXTRACTS, AROMATIC, LIQUID	
14.3 TRANSPORT HAZARD CLASS(ES)	ADR/RID/ADN CLASS: 3 IMDG CLASS: 3 ICAO CLASS/DIVISION: 3 TRANSPORT LABELS: FLAMMABLE 3	
14.4 PACKING GROUP	ADR/RID/ADN PACKING GROUP III IMDG PACKING GROUP III ICAO PACKING GROUP III	

14.5 Enviromental Hazards	ENVIRONMENTALLY HAZARDOUS / MARINE POLLUTANT.
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 01 /155 /ECC 03 /67 /ECC 03 /105 /EEC $\frac{9}{2}$ 2000 /21 /EC (INICIDING AMENICALIS)
STATUTORY INSTRUMENTS	DIRECTIVE 91/155/ECC, 93/67/ECC, 93/105/EEC & 2000/21/EC (INCLUDING AMENDMENTS). THE CHEMICALS (HAZARD INFORMATION & PACKAGING FOR SUPPLY REGULATIONS 2009 (S.I.2009 NO 716).
STATUTORY INSTRUMENTS APPROVED CODE OF PRACTICE	THE CHEMICALS (HAZARD INFORMATION & PACKAGING FOR SUPPLY REGULATIONS 2009 (S.I.2009
	THE CHEMICALS (HAZARD INFORMATION & PACKAGING FOR SUPPLY REGULATIONS 2009 (S.I.2009 NO 716). CLASSIFICATION & LABELLING OF SUBSTANCES & PREPARATIONS DANGEROUS FOR SUPPLY. SAFETY DATA

SECTION 16: OTHER INFORMATION		
Hazard and/ or Precautionary Statements in full	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.	
	H319 Causes serious eye irritation.	
	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.	
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 MERCHANDISES 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™ April 2018	Data Launch