

## Material Safety Data Sheet

EU Regulation: 2020/878

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING						
1.1 PRODUCT IDENTIFICATION						
PRODUCT NAME	Lemongrass (Fl	LEMONGRASS (FLEXUOSUS), ESSENTIAL OIL				
BIOLOGICAL DEFINITION		CYMBOPOGON FLEXUOSUS OIL IS THE VOLATILE OIL OBTAINED FORM THE DRIED LEMON GRASS, CYMBOPOGON FLEXUOSUS, POACEAE				
INCI NAME	CYMBOPOGON F	CYMBOPOGON FLEXUOSUS HERB OIL				
SYNONYMS & TRADE NAMES	-					
INTERNAL PRODUCT CODE	K0502	K0502				
CAS-No	91844-92-7	EC No.	295-161-9	EINECS No.		295-161-9
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET						
COMPANY ADDRESS Unit 2, Athelstan Business Park, Hanwell Lane, Hutton Conyers, Ripon, HG4 5BF, England.						
	EMAIL TECHNICALCREW@OAND3.COM					
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET						
EMERGENCY CONTACTS	(07968 200167)	1				



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 ASP: SKIN IRRIT. 2 - H315; EYE DAM. 1 - H318; SKIN SENS. 1 - H317  ENVIRONMENT: AQUATIC CHRONIC 2 - H411			
2.2 LABEL ELEMENTS	Label in accordance with Regulation (EC) No 1272/2008.			
GHS LABEL	GHS05 GHS07 GHS09			
Signal Word	Danger.			
Contains	CITRAL, GERANIOL			
HAZARDS STATEMENT	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	P272 CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE. P273 AVOID RELEASE TO THE ENVIRONMENT. P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. P261 AVOID BREATHING VAPOUR/SPRAY. P264 WASH CONTAMINATED SKIN THOROUGHLY AFTER HANDLING. P305+351+338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.			
SUPPLEMENTARY PRECAUTIONARY STATEMENTS				
2				
2.3	tion 16 (Other Information): Risk & Safety phrases in full.			
OTHER HAZARDS				
ADVERSE PHYSIO-CHEMICAL PROPERTIES	NO DATA			



ADVERSE EFFECTS ON HUMAN HEALTH	No Data
PBT OR VPVB ACCORDING TO ANNEX XIII	No Data
SECTION 3: COMPOSITION OF INGR	REDIENTS
	70.0 – 72.0% CITRAL CAS-No.: 5392-40-5 EC No.: 226-394-6
	CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315, EYE IRRIT. 2 - H319, SKIN SENS. 1 - H317
	7.0 – 8.0% Geraniol CAS-No.: 106-24-1 EC No.: 203-377-1 Classification (EC 1272/2008) Skin Irrit. 2 - H315, Eye Dam. 1 - H318, Skin Sens. 1 - H317  0.5 – 0.7% Limonene CAS-No.: 5989-27-5 EC No.: 227-813-5 Classification (EC 1272/2008) Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, ASP. Tox. 1 - H304 AQUATIC ACUTE 1 - H400, AQUATIC CHRONIC 1 - H410
3.2 SUBSTANCES	1.0 – 1.2% Linalool CAS-No.: 78-70-6 EC No: 201-134-4
	Classification (EC 1272/2008) Skin Irrit. 2 - H315, Skin Sens. 1B - H317, Eye Irrit. 2- H319
	<1.0% ALPHA-PINENE CAS-NO.: 80-56-8 EC NO: 201-291-9 CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3 - H226, ACUTE TOX. 4 - H302, ASP. TOX. 1 - H304, SKIN IRRIT. 2 - H315, SKIN SENS. 1 - H317, AQUATIC ACUTE 1 - H400, AQUATIC CHRONIC 1 - H410
	≤1.0% MYRCENE CAS-NO.: 123-35-3 EC NO: 204-622-5 CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3 - H226, ASP. TOX. 1 - H304 SKIN IRRIT. 2 - H315 EYE IRRIT. 2 - H319, AQUATIC ACUTE 1- H400, AQUATIC CHRONIC 1 - H410

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
INHALATION	OBTAIN MEDICAL ATTENTION.
Ingestion	GET MEDICAL ATTENTION IMMEDIATELY. RINSE MOUTH WITH WATER AND OBTAIN MEDICAL ATTENTION.
SKIN CONTACT	REMOVE CONTAMINATED CLOTHES. WASH THOROUGHLY WITH SOAP AND WATER. CONTACT PHYSICIAN IF
3RIN CONTACT	IRRITATION PERSISTS.
EYE CONTACT	Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.
4.2	INHALATION MAY CAUSE COUGHING AND DIFFICULTIES IN BREATHING.
MOST IMPORTANT SYMPTOMS & EFFECTS (ACUTE	INGESTION IRRITATING TO THE RESPIRATORY TRACT AND MAY CAUSE DAMAGE TO THE CENTRAL NERVOUS SYSTEM.
·	SKIN CONTACT TOXIC IN CONTACT WITH SKIN.
& Delayed)	EYE CONTACT MAY CAUSE EYE IRRITATION.
4.3	NONE EXPECTED OF CECTION 4.1 FOR FURTHER INFORMATION
INDICATION OF ANY IMMEDIATE MEDICAL	None expected, see Section 4.1 for further information.



ATTENTION OR SPECIAL TREATMENT REQUIRED	
SECTION 5: FIRE FIGHTING MEAS	SURES

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 Advice for fire-fighters	SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:  WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING.	
SECTION 6: ACCIDENTAL RELEASE M	IEASURES	
5.1 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.	
5.2 Environmental precautions	DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOC AUTHORITY GUIDELINES.	
5.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING UP	REMOVE IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. AVOID EXCESSIVE INHALATION OF VAPOUR CONTAIN SPILLAGE IMMEDIATELY BY USE OF SAND OR INERT POWDER. DISPOSE OF ACCORDING TO LOCAL REGULATIONS.	
5.4 REFERENCES TO OTHER SECTIONS	Refer & consider section 8. Refer & consider section 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 ncompatibilities	KEEP THE PRODUCT CONTAINER TIGHTLY CLOSED, IN A DRY, VENTILATED AREA. KEEP AWAY FROM POTENTI SOURCES OF IGNITION AND PROTECTED FROM LIGHT. MAINTAIN LIMITED CONTACT WITH OXYGEN.	
7.3 SPECIFIC END USE(S)	NO DATA.	
SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION		
3.1	LINALOOL (CAS: 78-70-6) INGREDIENT COMMENTS: NO EXPOSURE LIMITS NOTED FOR INGREDIENT (SEUGENOL (CAS: 97-53-0) INGREDIENT COMMENTS: WEL = WORKPLACE EXPOSURE LIMITS	



EYE PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.
HAND PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.
	UNDER NORMAL CONDITIONS OF USE AND WHERE ADEQUATE VENTILATION IS AVAILABLE TO PREVENT BUILD
	UP OF EXCESSIVE VAPOUR, THIS MATERIAL SHOULD NOT REQUIRE SPECIAL ENGINEERING CONTROLS.
	HOWEVER, IN CONDITIONS OF HIGH OR PROLONGED USE, OR HIGH TEMPERATURE OR OTHER CONDITIONS
RESPIRATORY EQUIPMENT	WHICH INCREASE EXPOSURE, THE FOLLOWING ENGINEERING CONTROLS CAN BE USED TO MINIMISE EXPOSURE
	TO PERSONNEL: A) INCREASE VENTILATION OF THE AREA WITH LOCAL EXHAUST VENTILATION. B) PERSONNEL
	CAN USE AN APPROVED, APPROPRIATELY FITTED RESPIRATOR WITH ORGANIC VAPOUR CARTRIDGE OR
	CANISTERS AND PARTICULATE FILTERS. C) USE CLOSED SYSTEMS FOR TRANSFERRING AND PROCESSING THIS
	MATERIAL. ALSO REFER TO SECTIONS 2 AND 7.
HYGIENE MEASURES	
	/ OILS.
ENGINEERING MEASURES	NONE.
SKIN PROTECTION	
PERSONAL PROTECTION	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES.
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	CLEAR - YELLOW
ODOUR	Characteristic
RELATIVE DENSITY	Approx 0.899 @ 20°C
FLASH POINT (°C)	71.0 - 85.0 °C
SOLUBILITY IN WATER @ 20 °C	1:10 v/v Ethanol 90%
9.2 Other Information	NO DATA.
9.2.1	
INFORMATION WITH REGARD TO PHYSICAL HAZARD	No Data.
CLASSES	
9.2.2	No Data.
OTHER SAFETY CHARACTERISTICS	
SECTION 10: STABILITY & REACTIVITY	
10.1	Presents no significant reactivity hazards, by itself or in contact with water. Stable under
REACTIVITY	NORMAL TEMPERATURE AND STORAGE CONDITIONS AND RECOMMENDED USE.



10.2 CHEMICAL STABILITY	Stable under suggested storage conditions (<15°C).
10.3 POSSIBILITY OF HAZARDOUS REACTIONS	No.
10.4 CONDITIONS TO AVOID	STORAGE AT HIGH TEMPERATURES. DO NOT STORE ABOVE 15°C.
10.5 INCOMPATIBLE MATERIALS	P.V.C
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.

11.1 TOXICOLOGICAL EFFECTS		
	ACUTE TOXICITY	NO DATA
	SKIN IRRITATION	MAY CAUSE SENSITISATION BY SKIN CONTACT.
	EYE DAMAGE OR IRRITATION	SPRAY AND VAPOUR IN THE EYES MAY CAUSE IRRITATION AND SMARTING.
RESPIRATORY OR SKIN SENSITIVITY		IN HIGH CONCENTRATIONS, VAPOURS MAY IRRITATE THROAT AND RESPIRATORY SYSTEM AND CAUSE COUGHING.
	GERM CELL MUTAGENICITY	NEGATIVE. (SOURCE CSR).
	CARCINOGENICITY	NOT APPLICABLE.
	REPRODUCTIVE TOXICITY	NOT APPLICABLE.
	STOT – SINGLE EXPOSURE	NOT APPLICABLE.
	STOT – REPEATED EXPOSURE	NOT APPLICABLE.
	ASPIRATION HAZARD	May be fatal if swallowed and enters airways (H304).
11.2		
INFORMATION ON OTHER HAZA		TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
SECTION 12: ECOLOG		TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.  DANGEROUS FOR THE ENVIRONMENT: MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE
SECTION 12: ECOLOGIA:  12.1 TOXICITY		TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
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SECTION 12: ECOLOGIA:  12.1  TOXICITY 12.2	GICAL INFORMATION	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.  DANGEROUS FOR THE ENVIRONMENT: MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THI AQUATIC ENVIRONMENT.
SECTION 12: ECOLOGIA  12.1 TOXICITY 12.2 PERSISTENCE & DEGRADABILITY 12.3	GICAL INFORMATION	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.  DANGEROUS FOR THE ENVIRONMENT: MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THI AQUATIC ENVIRONMENT.  NO DATA.
INFORMATION ON OTHER HAZAL SECTION 12: ECOLOG  12.1 TOXICITY 12.2 PERSISTENCE & DEGRADABILITY 12.3 BIO- ACCUMULATIVE POTENTIAL 12.4	GICAL INFORMATION	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.  DANGEROUS FOR THE ENVIRONMENT: MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THI AQUATIC ENVIRONMENT.  NO DATA.  NO DATA.
INFORMATION ON OTHER HAZAL SECTION 12: ECOLOR  12.1 TOXICITY 12.2 PERSISTENCE & DEGRADABILITY 12.3 BIO- ACCUMULATIVE POTENTIAL 12.4 MOBILITY IN SOIL 12.5	GICAL INFORMATION  , L SSMENT	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.  DANGEROUS FOR THE ENVIRONMENT: MAY CAUSE LONG-TERM ADVERSE EFFECTS IN TH AQUATIC ENVIRONMENT.  NO DATA.  NO DATA.  NO DATA.



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.

14.1 Transport Information			
	UN NUMBER	ROAD: 3082 RAIL: 3082 AIR: 3082	
14.2 UN Shipping Name			RDOUS SUBSTANCE LIQUID N.O.S.
14.3 Transport hazard class(es)		ADR/RID/ADN CLASS: ARTICLES. IMDG CLASS: ARTICLES. ICAO CLASS/DIVISION: ARTICLES. TRANSPORT LABELS  MISCELLANEOUS DANGEROUS GOODS 9	9 MISCELLANEOUS DANGEROUS SUBSTANCES AND 9 MISCELLANEOUS DANGEROUS SUBSTANCES AND 9 MISCELLANEOUS DANGEROUS SUBSTANCES AND
14.4 PACKING GROUP		ADR/RID/ADN PACKING GRO IMDG PACKING GROUP ICAO PACKING GROUP ENVIRONMENTALLY HAZARDOL	DUP III III III US SUBSTANCE/MARINE POLLUTANT
14.5 Enviromental Hazards		¥2	
14.6 SPECIAL PRECAUTIONS FOR USER		EMS F-A-S-F EMERGENCY ACTION CODE 3Z HAZARD NO. (ADR) 90 ENVIRO DANGEROUS SUBSTANCES. TUNNEL RESTRICTION CODE (E	DNMENTALLY HAZARDOUS SUBSTANCE; MISCELLANEOUS



TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 THE IBC CODE.	NO ADDITIONAL DATA.			
SECTION 15: REGULATORY INFORMATION				
15.1 PRODUCT SPECIFIC SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS & LEGISLATION				
EU DIRECTIVI	REGULATION (EC) NO 2020/878 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 <sup>TH</sup> 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 INSTRUMENT	THE CHEMICALS (HAZARD INFORMATION & PACKAGING FOR SUPPLY REGULATIONS 2009 (S.I.2009 NO 716).			
APPROVED CODE OF PRACTIC	CLASSIFICATION & LABELLING OF SUBSTANCES & PREPARATIONS DANGEROUS FOR SUPPLY.  SAFETY DATA SHEETS FOR SUBSTANCES & PREPARATIONS.			
GUIDANCE NOTE	WORKPLACE EXPOSURE LIMITS EH40. CHIP FOR EVERYONE HSG 108.			
15.2 CHEMICAL SAFETY ASSESSMENT	-			

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.
	H318: Causes serious eye damage.
	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 <sup>™</sup> APRIL 2018	Data Launch
2021	Review
JANUARY 2023	REVIEW