#### **CERTIFICATE OF ANALYSIS**

**PRODUCT NAME:** LEMONGRASS, ESSENTIAL OIL ORGANIC BATCH NUMBER: 4526109

Cas Number: 91844-92-7 Einecs Number: 295-161-9 Manufacturing Method: Steam Distilled

BEST BEFORE DATE : December 2026

ANALYTICAL DETAILS	RANGE	RESULTS
Appearance	LIQUID	-
COLOUR	Yellow - Brownish	-
Odour	CHARACTERISTIC, LEMON-LIKE	-
SPECIFIC GRAVITY @ 20°C	0.869 - 0.910	0.8928
Refractive Index @ 20°C	1.460 – 1.500	1.4845
OPTICAL ROTATION (°C)	-4.0 то +4.0	-2.283

STORAGE CONDITIONS STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

#### **ALLERGEN STATEMENT**

PRODUCT NAME: LEMONGRASS, ESSENTIAL OIL ORGANIC

#### **COSMETIC ALLERGENS**

Annex Illa		CAS NUMBER:	TOTAL ALLERGEN
Reference:		CAS NOWIDER.	INCLUSION (%):
67	AMYL CINNAMAL	122-40-7	0.000
68	BENZYL ALCOHOL	100-51-6	0.000
69	CINNAMYL ALCOHOL	104-54-1	0.000
70	CITRAL	5392-40-5	≤ 85.0
71	EUGENOL	97-53-0	0.000
72	HYDROXY-CITRONELLAL	107-75-5	0.000
73	ISO EUGENOL	97-54-1	0.000
74	AMYLCIN-NAMYL ALCOHOL	101-85-9	0.000
75	BENZYL SALICYLATE	118-58-1	0.000
76	CINNAMAL	104-55-2	0.000
77	COUMARIN	91-64-5	0.000
78	GERANIOL	106-24-1	0.000
70	HYDROXYISOHEXYL 3-CYCLOHEXENE		0.000
79	CARBOXALDEHYDE	31906-04-4	0.000
80	ANISE ALCOHOL	105-13-5	0.000
81	BENZYL CINNAMATE	103-41-3	0.000
82	FARNESOL	4602-84-0	0.000
83	BUTYLPHENYL METHYLPROPIONAL	80-54-6	0.000
84	LINALOOL	78-70-6	≤ 3.00
85	BENZYL BENZOATE	120-51-4	0.000
86	CITRONELLOL	106-22-9	0.000
87	HEXYL CINNAM-ALDEHYDE	101-86-0	0.000
88	LIMONENE	5989-27-5	≤ 11.0
89	METHYL 2-OCTYNOATE	111-12-6	0.000
90	ALPHA-ISOMETHYL IONONE	127-51-5	0.000
91	EVERNIA PRUNASTRI EXTRACT	90028-68-5	0.000
92	EVERNIA FURFURACEA EXTRACT	90028-67-4	0.000

#### **FOOD ALLERGENS**

Annex Illa		PRESENT IN	CONTAMINATION	FACTORY
Reference:		PRODUCT:	PRESENCE:	PRESENCE:
1	CEREALS (CONTAINING GLUTEN)	NO	NO	YES
2	CRUSTACEANS	NO	NO	NO
3	EGGS	NO	NO	NO
4	FISH	NO	NO	NO
5	PEANUTS	NO	NO	YES
6	SOYA	NO	NO	YES
7	MILK	NO	NO	YES
8	NUTS	NO	NO	YES
9	CELERY & CELERIAC	NO	NO	YES
10	MUSTARD	NO	NO	YES
11	SESAME	NO	NO	YES
12	SULPHUR DIOXIDE & SULPHITES	NO	NO	NO
13	LUPIN	NO	NO	NO
14	MOLLUSC	NO	NO	NO

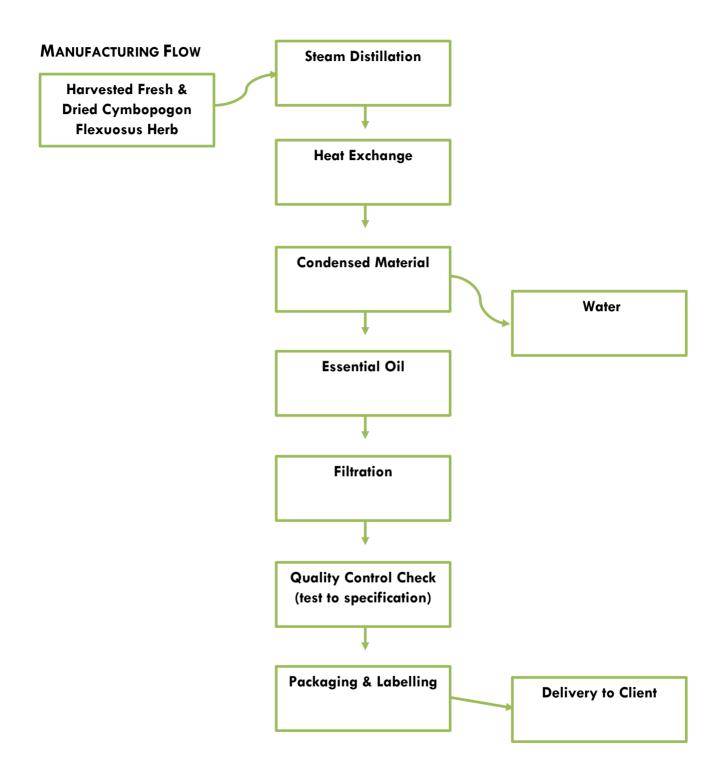
#### **MANUFACTURING FLOW & INCI STATEMENT**

PRODUCT NAME: LEMONGRASS, ESSENTIAL OIL ORGANIC

#### **INCI STATEMENT**

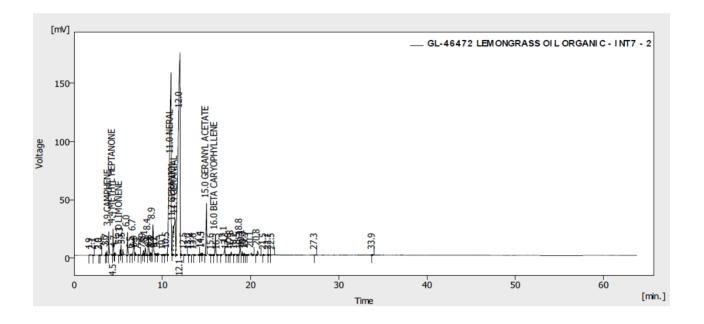
We can hereby confirm the following composition breakdown & manufacturing process flow.

INCI Name	% Inclusion	CAS Number
Cymbopogon Flexuosus Herb Oil	100	91844-92-7



#### TYPICAL GC STATEMENT

#### PRODUCT NAME: LEMONGRASS, ESSENTIAL OIL ORGANIC



Component	GC Value (%)	Specification
Camphene	1.07	Stated Not Specified
Methyl Heptanone	1.27	Stated Not Specified
Limonene	0.26	Stated Not Specified
Linalool	1.40	Stated Not Specified
Neral	30.15	Total Citral = 68 to 75%
Geranial	39.26	Total Citral = 68 to 75%
Geraniol	5.45	Stated Not Specified
Geranyl Acetate	2.44	Stated Not Specified
B - Caryophellene	1.31	Stated Not Specified

#### **GMO Statement**

PRODUCT NAME: Lemongrass Organic

MADAR Corporation Limited can confirm that the above listed product is GMO Free.

06/03/2023

#### **IFRA STATEMENT**

PRODUCT NAME: LEMONGRASS, ESSENTIAL OIL ORGANIC

PRODUCT INCI: CYMBOPOGON FLEXUOSUS HERB OIL

WE CERTIFY THAT THE ABOVE-MENTIONED MATERIAL CONFORMS TO THE IFRA 50 CODE OF PRACTICE AND CONTAINS THE FOLLOWING RESTRICTED COMPONENTS THAT ARE LISTED IN THE 50<sup>TH</sup> AMENDMENT OF THE IFRA CODE OF PRACTICE:

Restricted Component	Cas No:	% Level in Product	IFRA Standard
Limonene	5989-27-5	≤ 11.0	Specification Std
Linalool	78-70-6	≤ 3.0	Specification Std
Citral	5392-40-5	≤ 85.0	Restriction

IFRA Category	% Maximum Use Level
IFRA Category 1	0.13
IFRA Category 2	0.04
IFRA Category 3	0.12
IFRA Category 4	0.71
IFRA Category 5A	0.18
IFRA Category 5B	0.18
IFRA Category 5C	0.18
IFRA Category 5D	0.06
IFRA Category 6	0.41
IFRA Category 7A	0.24
IFRA Category 7B	0.24
IFRA Category 8	0.06
IFRA Category 9	1.41
IFRA Category 10A	1.41
IFRA Category 10B	4.94
IFRA Category 11A	0.06
IFRA Category 11B	0.06
IFRA Category 12	No Restriction

IFRA Category	Product Type	Flavour Use	Phototoxicity	
Category 1	Lip Products of all types (solid and liquid lipsticks, balms, clear or coloured, etc.). Children's toys.	Yes	Applicable (leave-on products)	
Category 2	Deodorant and antiperspirant products of all types including any product with intended or reasonably foreseeable use on the axillae or labelled as such (spray, stick, roll-on, under-arm, deo-cologne, etc.). Body sprays (including body mist)	No	Applicable (leave-on products)	
Category 3	<ul> <li>Eye products of all types (eye shadow, mascara, eyeliner, eye make-up, eye masks, eye pillows, etc.) including eye care and moisturizer</li> <li>Facial make up and foundation. Make-up remover for face and eyes. Nose pore strips. Wipes or refreshing tissues for face, neck, hands, body. Body and face paint (for children and adults). Facial masks for face and around the eyes</li> </ul>			
Category 4			Applicable (leave-on products)	
Category 5A			Applicable (leave-on products)	
Category 5B	Facial toner. Facial moisturizers and creams	No	Applicable (leave-on products)	
Category 5C	(women facial creams) Hand cream. Nail care products including cuticle creams, etc. Hand sanitizers	No	Applicable (leave-on products)	
Category 5D	Baby cream/lotion, baby oil, baby powders and talc.	No	Applicable (leave-on products)	
Category 6	Toothpaste. Mouthwash, including breath sprays. Toothpowder, strips, mouthwash tablets	Yes	Applicable (leave-on products)	
Category 7A	Hair permanent or other hair chemical treatments (rinse-off) (e.g. relaxers), including rinse-off hair dyes	No	Applicable (leave-on products)	
Category 7B	Hair sprays of all types (pumps, aerosol sprays, etc.). Hair styling aids non-sprays (mousse, gels, leave- on conditioners). Hair permanent or other hair chemical treatments (leave-on) (e.g. relaxers), including leave-on hair dyes. Shampoo - Dry (waterless shampoo). Hair deodorizer	No	Applicable (leave-on products)	
Category 8	Intimate wipes. Tampons. Baby wipes. Toilet paper (wet).	No	Applicable (leave-on products)	
Category 9	Bar soap. Shampoo of all type. Cleanser for face (rinse-off). Conditioner (rinse-off). Liquid soap. Body washes and shower gels of all types. Baby wash, bath, shampoo. Bath gels, foams, mousses, salts, oils and other products added to bathwater. Foot care products (feet are placed in a bath for soaking). Shaving creams of all types (stick, gels, foams, etc.). All depilatories (including facial) and waxes for mechanical hair removal. Shampoos for pets	NO	Applicable (rinse-off products)	
Category 10A	Hand wash laundry detergent (including concentrates). Laundry pre-treatment of all types (e.g. paste, sprays, sticks). Hand dishwashing detergent (including concentrates). Hard surface cleaners of all types (bathroom and kitchen cleansers, furniture polish, etc.). Machine laundry detergents with skin contact (e.g. liquids, powders) including concentrates. Dry cleaning kits. Toilet seat wipes. Fabric softeners of all types including fabric softeners sheets. Household cleaning products, other types including fabric cleaners, soft surface cleaners, carpet cleaners, furniture polishes sprays and wipes, leather cleaning wipes, stain removers, fabric enhancing sprays, treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics). Floor wax. Fragranced oil for lamp ring, reed diffusers, pot-pourri, liquid refills for air fresheners (non-cartridge systems), etc. Ironing water (Odorized distilled water).	NO	Applicable (rinse-off products)	
Category 10B	Animal sprays – sprays applied to animals of all types. Air freshener sprays, manual, including aerosol and pump. Aerosol/spray insecticides	NO	Applicable (rinse-off products)	
Category 11A			Not applicable (leave-on products without UV exposure)	
Category 11B	11B Tights with moisturizers. Scented socks, gloves. Facial tissues (dry tissues). Napkins. Paper towels. Wheat bags. Facial masks (paper/protective) e.g. surgical masks not used as medical device. Fertilizers, solid (pellet or powder).		Applicable (leave- on products)	
Category 12	Candles of all types (including encased). Laundry detergents for machine wash with minimal skin contact (e.g. Liquid tabs, pods). Automated air fresheners and fragrancing of all types (concentrated aerosol with metered doses (range 0.05-0.5mL/spray), plug-ins, closed systems, solid substrate, membrane delivery, electrical, powders, fragrancing sachets, incense, liquid refills (cartridge), air freshening crystals). Air delivery systems. Cat litter. Cell phone cases. Deodorizers/maskers not intended for skin contact (e.g. fabric drying machine deodorizers, carpet powders). Fuels. Insecticides (e.g. mosquito coil, paper, electrical, for clothing) excluding aerosols/sprays. Joss sticks or incense sticks. Dish wash detergent and deodorizers – for machine wash. Olfactive board games. Paints. Plastic articles (excluding toys). Scratch and sniff. Scent pack. Scent delivery system (using dry air technology). Shoe polishes. Rim blocks (Toilet).	NO	Not applicable (non-skin contact products)	

#### **Material Safety Data Sheet**

EU Regulation: 2020/878

SECTION 1. INFUTITION ATION OF					
SECTION 1: IDENTIFICATION OF	- THE SUBSTANCE	/MIXIURE /	AND OF THE COMPANY/	UNDERTAKING	
1.1 PRODUCT IDENTIFICATION					
PRODUCT NAME	Lemongrass, Esse	NTIAL OIL OR	GANIC		
BIOLOGICAL DEFINITION		Cymbopogon Flexuosus Herb Oil is an essential oil obtained from the herbs of the Lemon Grass, Cymbopogon flexuosus, Gramineae.			
INCI NAME	Cymbopogon Fle	CYMBOPOGON FLEXUOSUS HERB OIL			
Synonyms & Trade Names	-				
INTERNAL PRODUCT CODE					
CAS-No	91844-92-7	EC No.	295-161-9	EINECS NO.	295-161-9
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
COMPANY ADDRESS	Madar Corporatio 19 - 20 Sandleheo		Estate, Fordingbridge, SP6 1F	PA	
EMAIL	technical@madarcorpc	oration.co.uk			
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
EMERGENCY CONTACTS	(01425 655 555				

LI TEXT FOR ALL HAZARD STATEMENTS IS DISPLAYED IN SECTION 16. DITIONAL DATA AVAILABLE. CAL AND CHEMICAL HAZARDS: NOT CLASSIFIED. IN HEALTH ASP: SKIN IRRIT. 2 - H315 SKIN SENS. 1 - H317 EYE DAM. 1 - H318 DOMENT: AQUATIC CHRONIC 2 - H411 IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.
AL AND CHEMICAL HAZARDS: NOT CLASSIFIED. IN HEALTH ASP: SKIN IRRIT. 2 - H315 SKIN SENS. 1 - H317 EYE DAM. 1 - H318 DOMENT: AQUATIC CHRONIC 2 - H411 IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008. GHS07 GHS07 GHS09 ER. GERANIOL CAUSES SKIN IRRITATION MAY CAUSE AN ALLERGIC SKIN REACTION CAUSES SERIOUS EYE DAMAGE TOXIC TO AQUATIC LIFE WITH LONG-LASTING EFFECTS
N HEALTH ASP: SKIN IRRIT. 2 - H315 SKIN SENS. 1 - H317 EYE DAM. 1 - H318 DNMENT: AQUATIC CHRONIC 2 - H411 N ACCORDANCE WITH REGULATION (EC) NO 1272/2008. GHS07 GHS07 GHS09 ER. GERANIOL CAUSES SKIN IRRITATION MAY CAUSE AN ALLERGIC SKIN REACTION CAUSES SERIOUS EYE DAMAGE TOXIC TO AQUATIC LIFE WITH LONG-LASTING EFFECTS
S GHS07 GHS07 GHS07 GHS09 GHS0
R. GERANIOL CAUSES SKIN IRRITATION MAY CAUSE AN ALLERGIC SKIN REACTION CAUSES SERIOUS EYE DAMAGE TOXIC TO AQUATIC LIFE WITH LONG-LASTING EFFECTS
GERANIOL CAUSES SKIN IRRITATION MAY CAUSE AN ALLERGIC SKIN REACTION CAUSES SERIOUS EYE DAMAGE TOXIC TO AQUATIC LIFE WITH LONG-LASTING EFFECTS
Causes skin irritation May cause an allergic skin reaction Causes serious eye damage Toxic to aquatic life with long-lasting effects
May cause an allergic skin reaction Causes serious eye damage Toxic to aquatic life with long-lasting effects
KEEP CONTAINER TIGHTLY CLOSED DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING AVOID RELEASE TO THE ENVIRONMENT WEAR PROTECTIVE GLOVES/CLOTHING/EYE-PROTECTION/FACE PROTECTION + P310: IMMEDIATELY CALL A POISON CENTRE OR DOCTOR P302+P352: IF ON SKIN: WASH WITH PLENTY OF / P305 + P351 + P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT , IF PRESENT AND EASY TO DO. CONTINUE RINSING DO NOT INDUCE VOMITING COLLECT SPILLAGE STORE LOCKED UP DISPOSE OF CONTENTS/CONTAINERS IN ACCORDANCE WITH LOCAL/NATIONAL REGULATIONS
DITIONAL DATA AVAILABLE.
16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.
DITIONAL DATA AVAILABLE.
DITIONAL DATA AVAILABLE.
DITIONAL DATA AVAILABLE.

ACUTE 1 - H400, AQUATIC CHRONIC 1 - H410

<b>0.5 – 3.0% Camphene</b> CAS-No.: 79-92-5 EC No.: 201-234-8 Classification (EC 1272/2008) Flam. Sol. 2, H228; Eye Irrit. 2, H319; Aquatic Chronic 1, H410
0.1 – 11.0% (D & L) LIMONENE CAS-NO.: 138-86-3, EC NO.: 205-341-0 Classification (EC 1272/2008) Flam Liq 3, H226; Asp Tox. 1, H304; Skin Irrit. 2, H315: Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
<b>1.0 – 3.0% Linalool</b> 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
0.01 – 6.0% Geranyl acetate CAS-No.: 105-87-3 EC No.: 203-341-5 Classification (EC 1272/2008) Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 3, H412
0.01 - 3.0% delta-Cadinene CAS-NO.: 483-76-1 EC NO.: NOT REGISTERED
0.01 – 3.0% Methyl Heptone CAS-No.: 110-93-0 EC No.: 203-816-7 Classification (EC 1272/2008) Flam. Liq. 3, H226; Eye Irrit. 2, H319
<b>0.01 – 2.0% Alpha-Pinene</b> 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 Chronic 1, H410
<b>0.01 – 1.5% Citronellol</b> CAS-NO.: 106-22-9 EC NO.: 203-375-0 Classification (EC 1272/2008) Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319
<b>0.01 – 1.0% Nerol</b> CAS-No.: 106-25-2 EC No.: 203-378-7 Classification (EC 1272/2008) Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Dam. 1, H318; Eye Irrit. 2, H319

SECTION 4: FIRST AID MEASURES	
4.1 Description of First Aid Measures	
GENERAL INFORMATION	IMMEDIATELY REMOVE ANY CLOTHING SOILED BY THE PRODUCT. SEEK IMMEDIATE MEDICAL ADVICE. IN CASE OF UNCONSCIOUSNESS PLACE PATIENT STABLY INSIDE POSITION FOR TRANSPORTATION. SEEK IMMEDIATE MEDICAL ADVICE.
INHALATION	GET MEDICAL ATTENTION IMMEDIATELY. REMOVE FROM EXPOSURE SITE TO FRESH AIR, KEEP AT REST, AND 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.
EYE CONTACT	FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IMMEDIATELY.
4.2 MOST IMPORTANT SYMPTOMS & EFFECTS (ACUTE & DELAYED)	NO ADDITIONAL INFORMATION AVAILABLE.
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	NO ADDITIONAL INFORMATION AVAILABLE.

5.1	CO2, SAND, EXTINGUISHING POWDER.
EXTINGUISHING MATERIAL	
5.2	
SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR	DURING HEATING OR IN CASE OF FIRE POISONOUS GASES ARE PRODUCED.
MIXTURE	
5.3	NO SPECIAL MEASURES REQUIRED.
ADVICE FOR FIRE-FIGHTERS	
EMERGENCY ACTION CODE: 3[Y] (FOAM + BA & FIRE KIT)	

SECTION 6: ACCIDENTAL RELEASE MEASUR	RES	
6.1	1	
PERSONAL PRECAUTIONS	WEAR PROTECTIVE EQUIPMENT. KEEP UNPROTECTED PERSONS AWAY.	
6.2 Environmental precautions	DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM OR ANY WATER COURSE. INFORM RESPECTIVE AUTHORITIES IN CASE OF SEEPAGE INTO WATER COURSE OR SEWAGE SYSTEM. DO NOT ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER.	
6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING UP	ABSORB WITH LIQUID BINDING MATERIAL (SAND, DIATOMITE, ACID BINDERS, UNIVERSAL BINDERS, SAWDUST). USE NEUTRALISIN AGENT. DISPOSE CONTAMINATED MATERIAL AS WASTE. TREAT WITH 2% SODIUM HYDROXIDE SOLUTION. ENSURE ADEQUATE VENTILATION.	
6.4 References to other sections	Take Hazard and Precautionary phrases (section 2) into account.	
SECTION 7: HANDLING & STORAGE		
	1	
7.1 Precautions for safe-handling	PREVENT FORMATION OF AEROSOLS.	
7.2	INFORMATION ABOUT FIRE AND EXPLOSION PROTECTION: NO SPECIAL MEASURES REQUIRED. REQUIREMENTS TO BE MET BY	
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY	STOREROOMS AND RECEPTACLES: NO SPECIAL REQUIREMENTS. INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE	
INCOMPATIBILITIES	FACILITY: NOT REQUIRED. KEEP CONTAINER TIGHTLY SEALED.	
	INDUSTRIAL USE: WASHING AND CLEANING PRODUCTS	
7.3 Specific end use(s)	PROFESSIONAL USE: WASHING AND CLEANING PRODUCTS; POLISHES AND WAX BLENDS; ORAL CARE PRODUCTS, COSMETICS CONSUMER USE: AIR CARE PRODUCTS; BIOCIDES; POLISHES AND WAX BLENDS; COSMETICS; WASHING AND CLEANING	
SPECIFIC END USE(S)	PRODUCTS	
PERSONAL PROTECTION 8.1 Control Parameters	NOT STATED	
8.2 EXPOSURE CONTROLS		
	SAFETY GLASSES. TIGHTLY SEALED GOGGLES.	
	PROTECTIVE GLOVES. THE GLOVE MATERIAL HAS TO BE IMPERMEABLE AND RESISTANT TO THE PRODUCT. SELECTION OF GLOVE	
	MATERIAL ON CONSIDERATION OF THE PENETRATION TIMES, RATES OF DIFFUSION AND THE DEGRADATION. MATERIAL OF THE	
	GLOVES: THE SELECTION OF THE SUITABLE GLOVES DOES NOT ONLY DEPEND ON THE MATERIAL, BUT ALSO ON FURTHER MARKS	
HAND PROTECTION	OF QUALITY AND VARIES FROM MANUFACTURER TO MANUFACTURER. AS THE PRODUCT IS A PREPARATION OF SEVERAL	
	SUBSTANCES, THE RESISTANCE OF THE GLOVE MATERIAL CANNOT BE CALCULATED IN ADVANCE AND HAS SHOULD BE CHECKED	
	PRIOR TO THE APPLICATION. THE MULTICHEMICAL-RESISTANT GLOVE BARRIER 02-100 IS RECOMMENDED.	
	Use suitable respiratory protective device in case of insufficient ventilation. Protection of hands: protective	
RESPIRATORY EQUIPMENT	GLOVES.	
HYGIENE MEASURES	GLOVES. GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.	
ENGINEERING MEASURES	USE ONLY IN WELL-VENTILATED AREA.	
	WEAR PROTECTIVE CLOTHING TO REDUCE THE RISK OF SKIN AND EYE CONTACT.	
Personal Protection		
OTHER PROTECTION	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES.	
	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. ONLY ELIMINATE BY AUTHORISED COMPANIES.

#### **SECTION 9: PHYSICAL & CHEMICAL** PROPERTIES

9.1 Physical & Chemical Properties		
Appearance	Liquid	
COLOUR	YELLOW - BROWNISH	
Odour	Characteristic, Lemon-like	
RELATIVE DENSITY	0.869 – 0.910 @ 20°C	
FLASH POINT (°C)	>71°C	
<b>Refractive Index @ 20</b> °C	1.460 - 1.500 @ 20°C	
SOLUBILITY IN WATER @ 20 °C	Water – range for constituents = $0.21 - 4364.1$ mg/l at $25^{\circ}$ C; oil in 70% ethanol = $1:3$	
9.2	BOILING POINT @101 325 PA: 94°C	
9.2 Other Information	VAPOUR PRESSURE @ 25°C: 26.66	
	Freezing Point @101 325 Pa: - <-20°C	
SECTION 10: STABILITY & REACTIVITY		
10.1 Reactivity	NO FURTHER RELEVANT INFORMATION AVAILABLE	
10.2 Chemical stability	THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED: NO DECOMPOSITION IF USED ACCORDING TO SPECIFICATIONS.	
10.3 Possibility of hazardous reactions	NO DANGEROUS REACTIONS KNOWN.	
10.4 CONDITIONS TO AVOID	KEEP AWAY FROM HEAT OR FLAME. USE ONLY IN A WELL-VENTILATED AREA.	
10.5 INCOMPATIBLE MATERIALS	Oxidising Agents, strong acids, strong alkalis	
10.6 HAZARDOUS DECOMPOSITION PRODUCTS	NO DANGEROUS DECOMPOSITION PRODUCTS KNOWN.	

SECTION 11: TOXICOLOGICAL INFORMATION	
11.1 Toxicological effects	
Αсυτε Τοχιςιτγ	NO ADDITIONAL DATA AVAILABLE.
SKIN IRRITATION	CLASSIFIED SKIN IRRITANT (CAT. 2) - BASED ON CITRAL

Eye damage or irritation	Inconclusive for lemongrass but classified as eye damaging (based on geraniol $/$ H318)
<b>R</b> ESPIRATORY OR SKIN SENSITIVITY	MAY CAUSE AN ALLERGIC SKIN REACTION
GERM CELL MUTAGENICITY	NO ADDITIONAL DATA AVAILABLE.
CARCINOGENICITY	NO ADDITIONAL DATA AVAILABLE.
<b>R</b> EPRODUCTIVE TOXICITY	NO ADDITIONAL DATA AVAILABLE.
<b>STOT –</b> SINGLE EXPOSURE	NO ADDITIONAL DATA AVAILABLE.
STOT – REPEATED EXPOSURE	NO ADDITIONAL DATA AVAILABLE.
Aspiration hazard	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS (H304).
Other information	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC
	ENVIRONMENT.

#### **SECTION 12: ECOLOGICAL INFORMATION**

	FISH: NO DATA
12.1 Τοχιςιτγ	Algae: Pseudokirchnerella subcapitata (Eucalyptus Citriodora oil) 72h-Erl10 and 72h-Erl50 = 12 and 18 mg/L respectively
	AQUATIC INVERTEBRATES: DAPHNIA (LITSEA CUBEBA OIL) 48H-EL50 = 4.2 MG/L
12.2 PERSISTENCE & DEGRADABILITY	Considered readily biodegradable.
12.3 BIO- ACCUMULATIVE POTENTIAL	NO DATA.
12.4 Mobility in soil	NO DATA.
12.5 RESULTS OF PBT & VPVB ASSESSMENT	THE SUBSTANCE IS NOT PBT / VPVB.
12.6 OTHER ADVERSE EFFECTS	DO NOT ALLOW PRODUCT TO ENTER STREAMS, SEWERS OR OTHER WATERWAYS.

#### **SECTION 13: DISPOSAL INFORMATION**

13.1 Waste treatment methods	<b>RECOMMENDATION:</b> MUST NOT BE DISPOSED TOGETHER WITH HOUSEHOLD GARBAGE. DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM. UNCLEANED PACKAGING: RECOMMENDATION: DISPOSAL MUST BE MADE ACCORDING TO OFFICIAL REGULATIONS.
	SPECIAL PRECAUTIONS FOR LANDFILL AND INCINERATION: WASTE IS SUITABLE FOR INCINERATION

14.1 Transport Information	
	ROAD: NOT REGULATED
UN NUMBER	RAIL: NOT REGULATED
	AIR: NOT REGULATED
14.2 UN Shipping Name	NOT REGULATED FOR TRANSPORT.
14.3 Transport hazard class(es)	NOT REGULATED FOR TRANSPORT.
14.4 PACKING GROUP	NOT REGULATED FOR TRANSPORT.
14.5 Enviromental Hazards	SEE SECTION 2.

14.6	NO ADDITIONAL DATA AVAILABLE.
SPECIAL PRECAUTIONS FOR USER	
14.7	
TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	NO ADDITIONAL DATA AVAILABLE.
SECTION 15: REGULATORY INFORMATION	
15.1 Product specific safety, health & environmental regulations & legislation	
	Regulation (EC) No 1907/2006 of the European Parliament and of the council of $18^{ ext{th}}$
	DECEMBER 2006. CONCERNING THE REGISTRATION, EVALUATION, AUTHORIZATION & RESTRICTION OF
	CHEMICALS (REACH), ESTABLISHING A EUROPEAN CHEMICALS AGENCY, AMENDING DIRECTIVE
EU DIRECHVES	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
STATUTORT INSTRUMENTS	No 716).
APPROVED CODE OF PRACTICE	CLASSIFICATION & LABELLING OF SUBSTANCES & PREPARATIONS DANGEROUS FOR SUPPLY. SAFETY DATA
APPROVED CODE OF PRACTICE	SHEETS FOR SUBSTANCES & PREPARATIONS.
GUIDANCE NOTES	WORKPLACE EXPOSURE LIMITS EH40. CHIP FOR EVERYONE HSG 108.
15.2 Chemical Safety Assessment	-

SECTION 16: OTHER INFORMATION	
	H315 CAUSES SKIN IRRITATION.
HAZARD AND/ OR PRECAUTIONARY STATEMENTS IN FULL	H317 MAY CAUSE AN ALLERGIC SKIN REACTION.
,	H318 CAUSES SERIOUS EYE DAMAGE.
	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
ADR	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
10/04/2018	DATA LAUNCH
21/10/2021	Review
JANUARY 2023	REVIEW

#### **SPECIFICATION SHEET**

**PRODUCT NAME:** LEMONGRASS, ESSENTIAL OIL ORGANIC PRODUCT INCI: CYMBOPOGON FLEXUOSUS HERB OIL

Cas Number: 91844-92-7 Einecs Number: 295-161-9

MANUFACTURING METHOD: STEAM DISTILLED

SHELF LIFE/BEST BEFORE: 36 MONTHS

ANALYTICAL DETAILS	RANGE
APPEARANCE	LIQUID
COLOUR	Yellow - Brownish
Odour	Characteristic, Lemon-Like
Specific Gravity @ 20°C	0.869 - 0.910
REFRACTIVE INDEX @ 20°C	1.460 – 1.500
OPTICAL ROTATION (°C)	-4.0 to +4.0

STORAGE CONDITIONS STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

DATE	ISSUED BY	VERSION	REASON FOR UPDATE
21/10/2021	F.C	2.0	Change in INCI name, Colour & Odour Description & R.I Range.

#### Vegetarian & Vegan Suitability Statement

PRODUCT NAME: Lemongrass Organic

MADAR Corporation Limited can confirm that the above listed product has not been tested in animals and does not contain dairy or any other animal product, by product or derivative and is therefore suitable for vegetarian and vegan use.

06/03/2023