

### **CERTIFICATE OF ANALYSIS**

PRODUCT NAME: LEMON, ESSENTIAL OIL ORGANIC

**BATCH NUMBER: 4452421** 

PRODUCT INCI: CITRUS LIMON PEEL OIL

CAS NUMBER: 8008-56-8 / 84929-31-7

EINECS NUMBER: 284-515-8

MANUFACTURING METHOD: EXPRESSED

BEST BEFORE DATE: NOVEMBER 2024

ANALYTICAL DETAILS	RANGE	RESULTS
Appearance	LIQUID	-
COLOUR	COLOURLESS — YELLOW - GREEN	-
ODOUR	Characteristic, Fresh Lemon	-
SPECIFIC GRAVITY @ 25°C	0.840 – 0.870	0.851
Refractive Index @ 20°C	1.465 – 1.478	1.474
OPTICAL ROTATION (°C)	+55.0 to +85.0	+68.80

#### **STORAGE CONDITIONS**

STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT



## **ALLERGEN STATEMENT**

PRODUCT NAME: LEMON, ESSENTIAL OIL ORGANIC

### **COSMETIC ALLERGENS**

Annex Illa		CAC AULAADED.	TOTAL ALLERGEN	
Reference:		CAS NUMBER:		
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	4.5 – 5.0	
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	< 0.01	
70	HYDROXYISOHEXYL 3-CYCLOHEXENE	31906-04-4	0.000	
79	CARBOXALDEHYDE	31900-04-4	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	< 0.3	
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	65 – 68	
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**

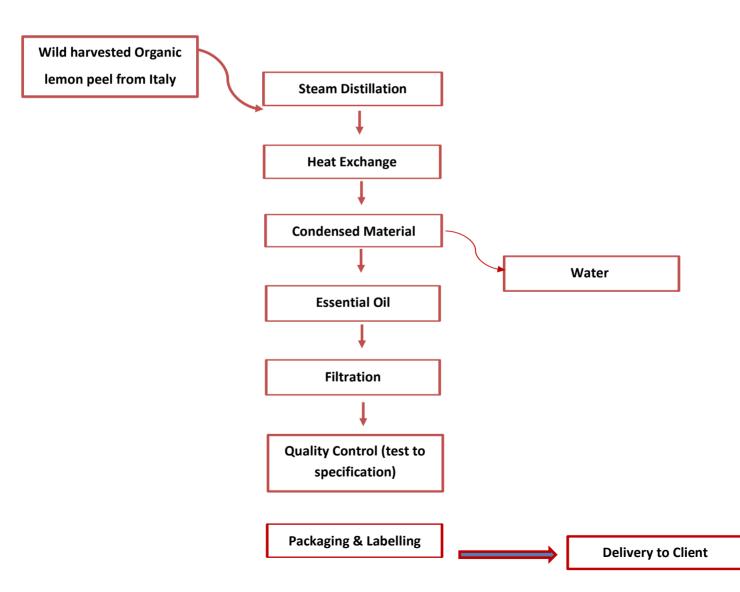
Annex Illa		PRESENT IN	CONTAMINATION	FACTORY
Reference:		PRODUCT:	PRESENCE:	PRESENCE:
1	CEREALS (CONTAINING GLUTEN)	NO	NO	YES
2	CRUSTACEANS	NO	NO	NO
3	EGGS	NO	NO	NO
4	FISH	NO	NO	NO
5	PEANUTS	NO	NO	YES
6	SOYA	NO	NO	YES
7	MILK	NO	NO	YES
8	NUTS	NO	NO	YES
9	CELERY & CELERIAC	NO	NO	YES
10	MUSTARD	NO	NO	YES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



### Composition Statement & Manufacturing Flow Chart

#### Lemon, Essential Oil Organic

INCI Name	% Inclusion	CAS Number
Citrus Limon Peel	100	8008-56-8





### **GMO Statement**

PRODUCT NAME: Lemon, Essential Oil Organic

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

12/02/18



## **IFRA STATEMENT**

PRODUCT NAME: LEMON, ESSENTIAL OIL ORGANIC

PRODUCT INCI: CITRUS LIMON PEEL OIL

MADAR COPORATION LIMITED CERTIFY THAT THE ABOVE-MENTIONED MATERIAL CONFORMS TO THE IFRA 49 CODE OF PRACTICE AND CONTAINS THE FOLLOWING RESTRICTED COMPONENTS THAT ARE LISTED IN THE  $49^{\text{TH}}$  Amendment of the IFRA Code of Practice:

Restricted Component	Cas No:	% Level in Product	IFRA Standard
Limonene	5989-27-5	65 – 68	Specification Std
Linalool	78-70-6	≤ 0.3	Specification Std
Citral	5392-40-5	9 - 10	Restriction Std
Geraniol	106-24-1	≤ 0.01	Restriction Std
Citronellal	106-23-0	≤ 0.01	Restriction
Geraniol	106-24-1	≤ 0.01	Restriction

IFRA Category	% Maximum Use Level
IFRA Category 1	2.157
IFRA Category 2	0.627
IFRA Category 3	1.961
IFRA Category 4	11.765
IFRA Category 5A	2.941
IFRA Category 5B	2.941
IFRA Category 5C	2.941
IFRA Category 5D	1.0
IFRA Category 6	6.863
IFRA Category 7A	3.922
IFRA Category 7B	3.922
IFRA Category 8	1.0
IFRA Category 9	23.529
IFRA Category 10A	23.529
IFRA Category 10B	40.0
IFRA Category 11A	1.0
IFRA Category 11B	1.0
IFRA Category 12	Not restricted

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	Eye products of all types (eye shadow, mascara, eyeliner, eye make-up, eye masks, eye pillows, etc.) including eye care and moisturizer  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		Applicable (leave-on products)
Category 4	Hydro alcoholic and non-hydro alcoholic fine fragrance of all types (Eau de Toilette, Parfum, Cologne, solid perfume, fragrancing cream, aftershaves of all types, etc.). Fragranced bracelets. Ingredients of perfume kits and fragrance mixtures for cosmetic kits. Scent pads, foil packs. Scent strips for hydro alcoholic products	No	Applicable (leave-on products)
Category 5A	Body creams, oils, lotions of all types. Foot care products (creams and powders). Insect repellent (intended to be applied to the skin).  All powders and talc (excluding baby powders and talc).	No	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-of products)
Category 11A	Feminine hygiene conventional pads, liners, interlabial pads. Diapers (baby and adult).  Adult incontinence pant, pad. Toilet paper (dry).	NO	Not applicable (leave-on products without UV exposure)
Category 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).	NO	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: 1907/2006** 

SECTION 1: IDENTIFICATION OF	THE SUBSTANC	E/MIXTURE A	AND OF THE COMPANY	/UNDERTAKING	
1.1 PRODUCT IDENTIFICATION					
PRODUCT NAME	LEMON, ESSENTIAL C	DIL ORGANIC			
BIOLOGICAL DEFINITION	CITRUS LIMON PEEL RUTACEAE.	CITRUS LIMON PEEL OIL IS THE VOLATILE OIL OBTAINED BY COLD COMPRESSION OF THE FRESH PEEL OF THE LEMON, CITRUS LIMON (L.), RUTACEAE.			
INCI NAME	CITRUS LIMON PEEL	CITRUS LIMON PEEL OIL			
SYNONYMS & TRADE NAMES	-				
INTERNAL PRODUCT CODE					
CAS-No	8008-56-8 / 84929-31 <i>-</i> 7	EC No.	284-515-8	EINECS No.	284-515-8
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
COMPANY ADDRESS	Madar Corporation 19-20 Sandlehea		ate, Fordingbridge, SP6 1PA	4	
EMAIL	technical@madarcorp	oration.co.uk			
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET	_			
EMERGENCY CONTACTS	01425 655 555				

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)	ASPIRATION TOXICITY CATEGORY 1 - (H304) SKIN CORROSION/IRRITATION CATEGORY 2 - (H315) SERIOUS EYE DAMAGE/EYE IRRITATION CATEGORY 2 - (H319) SKIN SENSITIZATION CATEGORY 1B - (H317) REPRODUCTIVE TOXICITY CATEGORY 2 - (H361) ACUTE AQUATIC TOXICITY CATEGORY 1 - (H400) CHRONIC AQUATIC TOXICITY CATEGORY 1 - (H410) FLAMMABLE LIQUIDS CATEGORY 3 - (H226)			
2.2 ABEL ELEMENTS	Label in accordance with Regulation (EC) No 1272/2008.			
GHS LABEL	GHS02 GHS07 GHS08 GHS09			
Signal Word	DANGER.			
CONTAINS	D-LIMONENE, BETA-PINENE, GAMMA-TERPINENE, PINENE ALPHA, LAEVO			
HAZARDS STATEMENT	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 H361 - SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD H410 - VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS H226 - FLAMMABLE LIQUID AND VAPOR CONTAINS NERYL ACETATE, DEXTRO ALPHA-PINENE, ALPHA-PINENE, GERANYL ACETATE EUH208 - CONTAINS (.?). MAY PRODUCE AN ALLERGIC REACTION			
Precautionary Statements	P210 - KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES NO SMOKING P201 - OBTAIN SPECIAL INSTRUCTIONS BEFORE USE P202 - DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD P280 - WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION P308 + P313 - IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ATTENTION P301 + P310 - IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR P331 - DO NOT INDUCE VOMITING P302 + P352 - IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER P333 + P313 - IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION P305 + P351 + P338 - IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING P337 + P313 - IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION P263 - AVOID CONTACT DURING PREGNANCY/WHILE NURSING P273 - AVOID RELEASE TO THE ENVIRONMENT P501 - DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL, REGIONAL, NATIONAL, AND INTERNATIONAL REGULATIONS AS APPLICABLE			
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	NO DATA			
	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	NO DATA			



SECTION 3: COMPOSITION C	OF INGREDIENTS
	≤ 60 - 70 % D-LIMONENE CAS-NO: 5989-27-5; EC No.: 227-813-5
3.2 MIXTURES	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, M FACTOR (ACUTE) = 1. M FACTOR (CHRONIC) = 1
	10 – 20 % BETA-PINENE CAS NO: 127-91-3 EC No: -
	Classification (EC 1272/2008) Acute Aquatic 1 (H400) (EFFA) Chronic Aquatic 1 (H410) (EFFA) Skin Sens. 1 (H317) (EFFA) Skin Irrit. 2 (H315) (EFFA) Asp. Tox. 1 (H304) (EFFA) Flam. Liq. 3 (H226)(EFFA)
	1 – 10 % GAMMA-TERPINENE CAS NO: 99-85-4 EC NO: -
	CLASSIFICATION (EC 1272/2008) REP 2 (H361), FLAM. LIQ. 3, ASPIR HAZ. 1 (H304), ACUTE TOX 5 (H303), SKIN IRRIT. 3 (H316)
	1 - 10% CITRAL CAS No: 5392-40-5 EC No: 226-394-6
	CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315, SKIN SENS. 1 - H317
	1 – 10 % PINENE ALPHA, LAEVO CAS NO: 7785-26-4 EC NO: -
	CLASSIFICATION (EC 1272/2008) ASP 1 (H304), ACUTE TOX 4 (H302), SKIN IRR 2 (H315), SKIN SENS 1 (H317), ACUTEAQUATIC 1 (H400), CHRONIC AQUATIC 1 (H410)
	1 – 10 % MYRCENE CAS NO: 123-35-3 EC NO: -
	Classification (EC 1272/2008) Eye Irrit. 2 (H319)(EFFA) Skin Irrit. 2(H315) (EFFA) Asp.Tox. 1 (H304) (EFFA)Flam. IQUID 3 (H226) (EFFA) Acute Aquatic 1 (H400) (EFFA) Chronic Aquatic 2 (H411) (EFFA)
	0.1 – 1.0 % Neryl acetate CAS No: 141-12-8 EC No: -
	CLASSIFICATION (EC 1272/2008) AQUATIC ACUTE 2 (H401), SKIN SENS. 1B (H317)
	0.1 – 1.0 % DEXTRO ALPHA-PINENE CAS NO: 7785-70-8 EC NO: -
	CLASSIFICATION (EC 1272/2008) SKIN SENS. 1B (H317) (EFFA) SKIN IRRIT. 2 (H315) (EFFA) ASP. TOX. 1 (H304) (EFFA) ACUTE TOX. 5 (H303)(EFFA) FLAM. LIQ. 3 (H226)(EFFA) ACUTE AQUATIC 1 (H400) (EFFA) CHRONIC AQUATIC 1 (H410) (EFFA)
	0.1 – 1.0 % ALPHA-TERPINEOL CAS NO: 98-55-5 EC NO: -
	CLASSIFICATION (EC 1272/2008) AQUATIC ACUTE 2. (H401) (EFFA) EYE IRRIT. 2 (H319) (EFFA) SKIN IRRIT. 2 (H315) (EFFA) ACUTE TOX. 5 (H303)(EFFA) FLAM. LIQ. 4 (H227)(EFFA)
	0.1 – 1.0 ALPHA-PINENE CAS NO: 80-56-8 EC NO: -
	Classification (EC 1272/2008) Acute Aquatic 1 (H400) (EFFA) Chronic Aquatic 1 (H410) (EFFA) Acute Tox. 4 (H302) (EFFA) Skin Sens. 1 B (H317) (EFFA) Skin Irrit. 2 (H315) (EFFA) Asp. Tox. 1 (H304) (EFFA) Flam. Liq. 3 (H226)(EFFA)
	0.1 – 1.0 % GERANYL ACETATE CAS NO: 105-87-3 EC No: -
	CLASSIFICATION (EC 1272/2008) SKIN SENS. 1B (H317) SKIN IRRIT. 2 (H315) AQUATIC CHRONIC 3 (H412) AQUATIC ACUTE 2 (H401)
	0.1-1.0 % SABINENE CAS NO: 3387-41-5 EC NO: -
	Classification (EC 1272/2008) Aspiration cat 1 (H304), Flam cat 3 (H226), Skin Irri cat 2 (H315), Skin sensi cat 1 B (H317), Acute aquatic cat 1 (H400), Chronic aquatic cat 1 (H410)
	0.1 – 1.0% LINALOOL CAS NO: 78-70-6 EC NO: -
	Classification (EC 1272/2008) Aquatic Acute 3 (H402) (EFFA) Eye Irrit. 2 (H319) (EFFA) Skin Irrit. 2 (H315) (EFFA) Acute Tox. 5 (H303)(EFFA) Flam. Liq. 4 (H227)(EFFA) Skin Sens. 1B (H317)(EFFA)
	0.1- 1.0 % TERPINOLENE CAS NO: 586-62-9 EC NO: -
	CLASSIFICATION (EC 1272/2008) AQUATIC ACUTE 1 (H400) (EFFA) EFFA) AQUATIC CHRONIC 1 (H410) (EFFA) ASP.TOX. 1 (H304) (EFFA) ACUTE TOX. 5 (H303)(EFFA) FLAM. LIQ. 4 (H227)(EFFA) SKIN IRRIT. 3 (H316) (EFFA) SKIN SENS. 1 (H317) (EFFA)

0.1 -1.0 % EUCALYPTOL CAS NO: 470-82-6 EC No: -
CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 3 (H316) (EFFA) ACUTE TOX. 5 (H303)(EFFA) FLAM. LIQ. 3 (H226)(EFFA) SKIN SENS. 1B (H317) (EFFA)
0.1 – 1.0 % CARYOPHYLLENE CAS NO: 87-44-5 EC No: -
CLASSIFICATION (EC 1272/2008) SKIN SENS. 1B (H317) (EFFA) ASP. TOX. 1 (H304) (EFFA) CHRONIC AQUATIC 4 (H413) (EFFA)
0.01 – 0.1 % DELTA-3-CARENE CAS NO: 13466-78-9 EC NO: -
CLASSIFICATION (EC 1272/2008) SKIN SENS. 1 (H317) (EFFA) SKIN IRRIT. 2 (H315) (EFFA) ASP. TOX. 1 (H304) (EFFA) ACUTE TOX. 5 (H303)(EFFA) FLAM. LIQ. 3 (H226)(EFFA) ACUTE AQUATIC 1 (H400)(EFFA) CHRONIC AQUATIC 1 (H410) (EFFA)
0.01 – 0.1 % PARA-CYMENE CAS NO: 99-87-6 EC NO: -
Classification (EC 1272/2008) Rep Tox. 2 (H361), Aquatic Acute 2 (H401), Skin Irrit. 3 (H316), Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Acute Tox. 5 (H303),Flam. Liq. 3 (H226)
0.01 – 0.1 % trans beta-Ocimene CAS No: 3779-61-1 EC No: -
Classification (EC 1272/2008) Acute Tox. 5 (H303) (EFFA) Asp. Tox. 1 (H304) (EFFA) Skin Irrit. 2 (H315) (EFFA) Acute Aquatic 1 (H400) (EFFA) Chronic Aquatic 2 (H411) (EFFA) Flam. Liq. 3 (H226) (EFFA)
0.01 – 0.1 % ALPHA-PHELLANDRENE CAS NO: 99-83-2 EC No: -
CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 3 (H316) (EFFA) ASP. TOX. 1 (H304) (EFFA) FLAM. LIQ. 3 (H226)(EFFA)
0.1 – 1.0 % BETA-BISABOLENE CAS NO: 495-61-4 EC NO: -
CLASSIFICATION (EC 1272/2008) SKIN SENS. 1 (H317) (EFFA) SKIN IRRIT. 2 (H315) (EFFA) ASP. TOX. 1 (H304) (EFFA)
< 0.01% GERANIOL CAS NO: 106-24-1 EC NO: -
Classification (EC 1272/2008) Skin Sens. 1B (H317) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 3 (H402) Acute Tox. 5 (Oral)(H303)
< 0.01% CITRONELLAL CAS NO: 106-23-0 EC No: -
Classification (EC 1272/2008) Flam. Liq. 4 (H227)(EFFA) Acute Tox. 5 (H303)(EFFA) Acute Tox. 5 (H313)(EFFA) Skin Irrit. 2 (H315)(EFFA) Eye Irrit. 2A (H319)(EFFA) Skin Sens. 1B (H317)(EFFA) Aquatic Acute 2 (H401)(EFFA)

SECTION 4: FIRST AID MEASURES	
4.1 DESCRIPTION OF FIRST AID MEASURES	
GENERAL INFORMATION	ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.
INHALATION	IMMEDIATE MEDICAL ATTENTION IS NOT REQUIRED. IF SYMPTOMS PERSIST, CALL A PHYSICIAN. MOVE TO FRESH AIR IN CASE OF ACCIDENTAL INHALATION OF VAPORS OR DECOMPOSITION PRODUCTS.
Ingestion	CLEAN MOUTH WITH WATER AND DRINK AFTERWARDS PLENTY OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL A PHYSICIAN. <b>DO NOT INDUCE VOMITING.</b>
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 DATA
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	TREAT SYMPTOMATICALLY.



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 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 Measur	RES
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,
6.2 ENVIRONMENTAL PRECAUTIONS	EYES AND CLOTHING.  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.
6.4 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 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 OF SMOKE WHEN USING THIS PRODUCT.
7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP THE PRODUCT CONTAINER TIGHTLY CLOSED, IN A DRY, VENTILATED AREA. KEEP AWAY FROM POTENTIAL 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**

Chemical Name	European Union	United Kingdom	France	Spain	Germany
d-Limonene 5989-27-5	-	8-1	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	S* TWA: 30 ppm TWA: 168 mg/m³	TWA: 5 ppm TWA: 28 mg/m³ Ceiling / Peak: 20 ppn Ceiling / Peak: 112 mg/m³ Skin
beta-Pinene 127-91-3	-	()=)	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 113 mg/m <sup>3</sup>	-
gamma-Terpinene 99-85-4	851	858	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	378	258
Citral 5392-40-5	72	028		S* TWA: 5 ppm	520
Myrcene 123-35-3		[( <b>-</b> )	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>		(=)
Dextro alpha-Pinene 7785-70-8	1880		TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	\$76	
alpha-Pinene 80-56-8	(2)	828	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 113 mg/m <sup>3</sup>	
Sabinene 3387-41-5	0,80	N=1	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	88.8	8=3
Terpinolene 586-62-9	(6) (6)	### E	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	176	15 to
delta-3-Carene 13466-78-9	S21	\$E	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 113 mg/m <sup>3</sup>	
para-Cymene 99-87-6	( <del>*</del> )	-	TWA: 150 mg/m <sup>3</sup> TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	SE 9	-
trans beta-Ocimene 3779-61-1	7.2	828	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	15/	328
alpha-Phellandrene 99-83-2	0.00	(F)	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	( <u>*</u> )	8=8
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
d-Limonene 5989-27-5	-	959	5	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 50 ppm STEL: 280 mg/m <sup>3</sup>	* v**
beta-Pinene 127-91-3		TWA: 20 ppm		(E)	3 <del>-</del> 8
alpha-Pinene 80-56-8	82	TWA: 20 ppm	804		N20
delta-3-Carene 13466-78-9	0.00	TWA: 20 ppm	(#E	886	8=8
para-Cymene 99-87-6	V287	676	-	654	TWA: 25 ppm TWA: 135 mg/m <sup>3</sup>

8.1 **CONTROL PARAMETERS** 

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
d-Limonene 5989-27-5	(A)	STEL: 14 ppm STEL: 80 mg/m <sup>3</sup> TWA: 7 ppm TWA: 40 mg/m <sup>3</sup>	858	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>	178
beta-Pinene 127-91-3	11.00 to	Skin STEL: 40 ppm STEL: 224 mg/m <sup>3</sup> TWA: 20 ppm TWA: 112 mg/m <sup>3</sup>	설립	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>	978
Citral 5392-40-5	72 <b>5</b> 7	69 <del>5</del> 8	STEL: 54 mg/m <sup>3</sup> TWA: 27 mg/m <sup>3</sup>	(SEA)	970
Myrcene 123-35-3	il <u>d</u> il		N24	TWA: 40 ppm TWA: 275 mg/m <sup>3</sup> STEL: 60 ppm STEL: 343.75 mg/m <sup>3</sup>	121
alpha-Pinene 80-56-8	3.50	Skin STEL: 40 ppm STEL: 224 mg/m <sup>3</sup> TWA: 20 ppm TWA: 112 mg/m <sup>3</sup>	S SS4	TWA: 25 ppm TWA: 140 mg/m³ Skin STEL: 37.5 ppm STEL: 175 mg/m³	151
delta-3-Carene 13466-78-9	3.50	Skin STEL: 40 ppm STEL: 224 mg/m <sup>3</sup> TWA: 20 ppm TWA: 112 mg/m <sup>3</sup>	S\$51	TWA: 25 ppm TWA: 140 mg/m³ STEL: 37.5 ppm STEL: 175 mg/m³	9.53

8.2			
EXPOSURE CONTROLS			
EXPOSURE CONTROLS			
W 27 1 7			
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		
RESPIRATORY EQUIPMENT	PROLONGED USE, OR HIGH TEMPERATURE OR OTHER CONDITIONS WHICH INCREASE EXPOSURE, THE FOLLOWING ENGINEERING		
RESTRATORT EQUIPMENT	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	GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.		
ENGINEERING MEASURES	PROVIDE ADEQUATE VENTILATION.		
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.		
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 INTRACTION, SALETT SHOWER & ETE BATT.		
PROCESS CONDITIONS  ENVIROMENTAL EXPOSURE CONTROLS			
	ENSURE AREA IS WELL VENTILATED. AVOID VAPOUR INHALATION. SAFETY SHOWER & EYE BATH.  AVOID DISCHARGING INTO DRAINAGE WATER.		
ENVIROMENTAL EXPOSURE CONTROLS			
ENVIROMENTAL EXPOSURE CONTROLS  SECTION 9: PHYSICAL & CHEMICAL			
ENVIROMENTAL EXPOSURE CONTROLS			
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES			
ENVIROMENTAL EXPOSURE CONTROLS  SECTION 9: PHYSICAL & CHEMICAL			
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1			
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES	AVOID DISCHARGING INTO DRAINAGE WATER.		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE	AVOID DISCHARGING INTO DRAINAGE WATER.  LIQUID		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR	AVOID DISCHARGING INTO DRAINAGE WATER.  LIQUID  COLOURLESS - YELLOW – GREEN		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR	AVOID DISCHARGING INTO DRAINAGE WATER.  LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON		
ENVIROMENTAL EXPOSURE CONTROLS  SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C		
ENVIROMENTAL EXPOSURE CONTROLS  SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C)	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C  48°C		
ENVIROMENTAL EXPOSURE CONTROLS  SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C)	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C  48°C  1.4710 - 1.4760 @ 20°C		
ENVIROMENTAL EXPOSURE CONTROLS  SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C) 9.2	LIQUID  COLOURLESS - YELLOW – GREEN  CHARACTERISTIC - LEMON  0.848 – 0.861 @ 25°C  48°C  1.4710 – 1.4760 @ 20°C  NO DATA.		
ENVIROMENTAL EXPOSURE CONTROLS  SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C)	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C  48°C  1.4710 - 1.4760 @ 20°C  NO DATA.  NO DATA.		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C) 9.2 OTHER INFORMATION SECTION 10: STABILITY & REACTIVITY	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C  48°C  1.4710 - 1.4760 @ 20°C  NO DATA.  NO DATA.		
ENVIROMENTAL EXPOSURE CONTROLS  SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C) 9.2 OTHER INFORMATION	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C  48°C  1.4710 - 1.4760 @ 20°C  NO DATA.  NO DATA.  NO DATA.  PRESENTS NO SIGNIFICANT REACTIVITY HAZARDS, BY ITSELF OR IN CONTACT WITH WATER. STABLE UNDER NORMAL		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE  COLOUR ODOUR  RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C)  9.2 OTHER INFORMATION SECTION 10: STABILITY & REACTIVITY  10.1 REACTIVITY	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C  48°C  1.4710 - 1.4760 @ 20°C  NO DATA.  NO DATA.		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C) 9.2 OTHER INFORMATION SECTION 10: STABILITY & REACTIVITY	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C  48°C  1.4710 - 1.4760 @ 20°C  NO DATA.  NO DATA.  NO DATA.  PRESENTS NO SIGNIFICANT REACTIVITY HAZARDS, BY ITSELF OR IN CONTACT WITH WATER. STABLE UNDER NORMAL		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C) 9.2 OTHER INFORMATION SECTION 10: STABILITY & REACTIVITY  10.1 REACTIVITY 10.2	LIQUID  COLOURLESS - YELLOW - GREEN  CHARACTERISTIC - LEMON  0.848 - 0.861 @ 25°C  48°C  1.4710 - 1.4760 @ 20°C  NO DATA.  NO DATA.  NO DATA.  PRESENTS NO SIGNIFICANT REACTIVITY HAZARDS, BY ITSELF OR IN CONTACT WITH WATER. STABLE UNDER NORMAL TEMPERATURE AND STORAGE CONDITIONS AND RECOMMENDED USE.		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE COLOUR ODOUR RELATIVE DENSITY FLASH POINT (°C) REFRACTIVE INDEX @ 20 °C SOLUBILITY IN WATER @ 20 °C AUTO-IGNITION TEMPERATURE (°C) 9.2 OTHER INFORMATION SECTION 10: STABILITY & REACTIVITY  10.1 REACTIVITY 10.2 CHEMICAL STABILITY 10.3 POSSIBILITY OF HAZARDOUS REACTIONS 10.4	LIQUID  COLOURLESS - YELLOW — GREEN  CHARACTERISTIC - LEMON  0.848 — 0.861 @ 25°C  48°C  1.4710 — 1.4760 @ 20°C  NO DATA.  NO DATA.  NO DATA.  PRESENTS NO SIGNIFICANT REACTIVITY HAZARDS, BY ITSELF OR IN CONTACT WITH WATER. STABLE UNDER NORMAL TEMPERATURE AND STORAGE CONDITIONS (<15°C).		
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES  9.1 PHYSICAL & CHEMICAL PROPERTIES  APPEARANCE  COLOUR ODOUR  RELATIVE DENSITY FLASH POINT (°C)  REFRACTIVE INDEX @ 20 °C  SOLUBILITY IN WATER @ 20 °C  AUTO-IGNITION TEMPERATURE (°C)  9.2 OTHER INFORMATION  SECTION 10: STABILITY & REACTIVITY  10.1 REACTIVITY  10.2 CHEMICAL STABILITY 10.3 POSSIBILITY OF HAZARDOUS REACTIONS	LIQUID  COLOURLESS - YELLOW — GREEN  CHARACTERISTIC - LEMON  0.848 — 0.861 @ 25°C  48°C  1.4710 — 1.4760 @ 20°C  NO DATA.  NO DATA.  NO DATA.  PRESENTS NO SIGNIFICANT REACTIVITY HAZARDS, BY ITSELF OR IN CONTACT WITH WATER. STABLE UNDER NORMAL TEMPERATURE AND STORAGE CONDITIONS AND RECOMMENDED USE.  STABLE UNDER SUGGESTED STORAGE CONDITIONS (<15°C).  NOT EXPECTED UNDER NORMAL CONDITIONS OF USE.		



10.6	This product does not decompose under normal conditions. Under fire conditions the product will produce
HAZARDOUS DECOMPOSITION PRODUCTS	A MIXTURE OF IRRITATING FUMES & SMOKE & CARBON MONOXIDE.

SECTION 11: TOXICOLOGICAL INFORMATION			
11.1 TOXICOLOGICAL EFFECTS			
Αςυτε Τοχιςιτή	THE FOLLOWING VALUES ARE CALCULATED BASED ON CHAPTER 3.1 OF THE GHS DOCUMENT ATEMIX (ORAL) >2,000.00 MG/KG ATEMIX (DERMAL) >5,000.00 MG/KG 90.4487 % OF THE MIXTURE CONSISTS OF INGREDIENT(S) OF UNKNOWN ACUTE DERMAL TOXIC 95.5488 % OF THE MIXTURE CONSISTS OF INGREDIENT(S) OF UNKNOWN ACUTE INHALATION TO (GAS) 95.5488 % OF THE MIXTURE CONSISTS OF INGREDIENT(S) OF UNKNOWN ACUTE INHALATION TO (VAPOR) 95.5488 % OF THE MIXTURE CONSISTS OF INGREDIENT(S) OF UNKNOWN ACUTE INHALATION TO (DUST/MIST)	CITY. TOXICIT	
SKIN IRRITATION	IRRITATING TO SKIN.		
EYE DAMAGE OR IRRITATION	CAUSES SERIOUS EYE IRRITATION.		
RESPIRATORY OR SKIN SENSITIVITY	MAY CAUSE SENSITISATION BY SKIN CONTACT.		
GERM CELL MUTAGENICITY	NOT CLASSIFIED.		
CARCINOGENICITY	NOT CLASSIFIED.		
D-100-11-11-11-11-11-11-11-11-11-11-11-11	SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. CONTAINS A KNOWN OR SUSPECT	ΓED	
REPRODUCTIVE TOXICITY	REPRODUCTIVE TOXIN. GAMMA-TERPINENE. PARA-CYMENE.		
STOT – SINGLE EXPOSURE	NOT CLASSIFIED.		
STOT – repeated exposure	NOT CLASSIFIED.		
ASPIRATION HAZARE			
	NO DATA.		
OTHER INFORMATION	NO DATA.		
	Chemical Name Crustacea Algae/aquatic plants Fish	valee	
	Chemical Name   Crustacea   Algae/aquatic plants   Fish	1111	
	Chemical Name         Crustacea         Algae/aquatic plants         Fish           d-Limonene         48hr EC50 - 0.4 mg/L (Daphnia magna)         96 hr NOEC - 4mg/L (Green algae)         96hr LC50 - 0.7 mg/L (Pimeph promelas)           Citral         7: 48 h Daphnia magna mg/L EC50         4.6 - 10: 96 h Leucisus idus LC50 static	mg/L	
	Chemical Name	mg/L lanio	
SECTION 12: ECOLOGICAL INFORMATION  12.1	Chemical Name   Crustacea   Algae/aquatic plants   Fish	mg/L lanio	
SECTION 12: ECOLOGICAL INFORMATION  12.1	Chemical Name	mg/L lanio	
SECTION 12: ECOLOGICAL INFORMATION  12.1 TOXICITY	Chemical Name	mg/L lanio mo elas	
SECTION 12: ECOLOGICAL INFORMATION  12.1	Chemical Name	mg/L lanio mo elas h - 57 is)	
SECTION 12: ECOLOGICAL INFORMATION  12.1 TOXICITY	Chemical Name	mg/L vanio mo elas h - 57 vs)	
SECTION 12: ECOLOGICAL INFORMATION  12.1 TOXICITY  12.2 PERSISTENCE & DEGRADABILITY 12.3	Chemical Name	mg/L vanio mo elas h - 57 vs)	
SECTION 12: ECOLOGICAL INFORMATION  12.1 TOXICITY  12.2 PERSISTENCE & DEGRADABILITY 12.3 BIO- ACCUMULATIVE POTENTIAL 12.4 MOBILITY IN SOIL	Chemical Name	mg/L vanio mo elas h - 57 vs)	
SECTION 12: ECOLOGICAL INFORMATION  12.1 TOXICITY  12.2 PERSISTENCE & DEGRADABILITY 12.3 BIO- ACCUMULATIVE POTENTIAL 12.4	Chemical Name Crustacea Algae/aquatic plants G-Limonene 48hr EC50 - 0.4 mg/L (Daphnia magna) 96 hr NOEC - 4mg/L (Green algae) 96hr LC50 - 0.7 mg/L (Pimeph promelas) 1.65 o.10 mg/L (Salaria alpha-Terpineol 48hr EC50 - 73 mg/l (Daphnia magna) 72hr EC50 - 68mg/l 96hr LC50 - 62 to 80 mg/L (Daphnia magna) 1.65 o.10 mg/L (Desmodesmus subspicatus) 1.65 o.10 mg/L (Daphnia magna) 1.65 o.10 mg/L (Pseudokirchneifella subcapitata) 1.65 o.10 mg/L (Daphnia magna) 1.65 o.10 mg/L (Pseudokirchneifella subcapitata) 1.65 o.10 mg/L (Daphnia magna) 1.65 o.10 mg/L (Pseudokirchneifella subcapitata) 1.65 o.10 mg/L (Orcorhynchus mykis mg/L (Orcorhynchus mykis mg/L (Oscendesmus) 1.65 o.10 mg/L (Oscendesmus) 1	mg/L vanio mo elas h - 57 vs)	



OTHER ADVERSE EFFECTS	
SECTION 13: DISPOSAL INFORMATION	
13.1 WASTE TREATMENT METHODS	THE CONTAINERS USED FOR THIS PRODUCT MUST BE COMPLETELY EMPTY BEFORE DISPOSAL. DISPOSE PRODUCT AND / OR CONTAMINATED PACKAGING IN ACCORDANCE WITH LOCAL AND INTERNATIONAL REGULATIONS. DISPOSAL THROUGH THE WASTE WATER IS ILLEGAL.

14.1 Transport Information	
	ROAD: 1993
UN NUMBER	RAIL: 1993
	AIR: 1993
14.2 UN SHIPPING NAME	FLAMMABLE LIQUID, N.O.S.
ON SHIFFING NAME	IMDG  14.1 UN/ID NO 1993  14.2 PROPER SHIPPING NAME FLAMMABLE LIQUID, N.O.S.  14.3 HAZARD CLASS 3  14.4 PACKING GROUP III  DESCRIPTION (LIMONENE)  14.5 MARINE POLLUTANT THIS PRODUCT CONTAINS A CHEMICAL WHICH IS LISTED AS A MARINE POLLUTANT ACCORDING TO IMDG/IMO  ENVIRONMENTAL HAZARD YES  14.6 SPECIAL PROVISIONS 223, 274, 955  EMS-NO F-E, S-E  14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE IBCO3  RID  14.1 UN/ID NO 1993
14.3 Transport hazard class(es)	14.2 Proper Shipping Name Flammable Liquid, N.O.S. 14.3 Hazard Class 3 14.4 Packing Group III DESCRIPTION (LIMONENE) 14.5 ENVIRONMENTAL HAZARD YES 14.6 SPECIAL PROVISIONS NONE
	ADR  14.1 UN/ID NO 1993  14.2 PROPER SHIPPING NAME FLAMMABLE LIQUID, N.O.S.  14.3 HAZARD CLASS 3  LABELS 3  14.4 PACKING GROUP III  DESCRIPTION (LIMONENE)  14.5 ENVIRONMENTAL HAZARD YES  14.6 SPECIAL PROVISIONS 274, 601  CLASSIFICATION CODE F1  TUNNEL RESTRICTION CODE (D/E)
	ICAO (AIR)  14.1 UN/ID NO 1993  14.2 PROPER SHIPPING NAME FLAMMABLE LIQUID, N.O.S  14.3 HAZARD CLASS 3  14.4 PACKING GROUP III  DESCRIPTION (LIMONENE)  14.5 ENVIRONMENTAL HAZARD YES  14.6 SPECIAL PROVISIONS NONE

	IATA  14.1 UN/ID NO 1993  14.2 PROPER SHIPPING NAME FLAMMABLE LIQUID, N.O.S.  14.3 HAZARD CLASS 3  14.4 PACKING GROUP III  DESCRIPTION (LIMONENE)  14.5 ENVIRONMENTAL HAZARD YES  14.6 SPECIAL PROVISIONS A3  ERG CODE E1  TRANSPORT LABELS
14.4 PACKING GROUP	ADR/RID/ADN PACKING GROUP III IMDG PACKING GROUP III
14.5 ENVIROMENTAL HAZARDS	ICAO PACKING GROUP III ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT
14.6 SPECIAL PRECAUTIONS FOR USER	CONTAINS CONSTITUENTS THAT ARE FLAMMABLE & DANGEROUS TO THE ENVIRONMENT.
14.7 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 DIRECTIVES	REGULATION (EC) NO 1907/2006 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 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 SHEETS FOR SUBSTANCES & PREPARATIONS.
GUIDANCE NOTES	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 VAPOR H227 - COMBUSTIBLE LIQUID H302 - HARMFUL IF SWALLOWED H303 - MAY BE HARMFUL IF SWALLOWED H304 - MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS H313 - MAY BE HARMFUL IN CONTACT WITH SKIN H315 - CAUSES SKIN IRRITATION H316 - CAUSES MILD SKIN IRRITATION H317 - MAY CAUSE AN ALLERGIC SKIN REACTION H319 - CAUSES SERIOUS EYE IRRITATION H361 - SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD H400 - VERY TOXIC TO AQUATIC LIFE H401 - TOXIC TO AQUATIC LIFE H410 - VERY TOXIC TO AQUATIC LIFE H410 - VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS H411 - TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS H412 - HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS 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 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>th</sup> April 2018	Data Launch
November 2020	Review
2021	Review



## **SPECIFICATION SHEET**

PRODUCT NAME: LEMON, ESSENTIAL OIL ORGANIC

PRODUCT INCI: CITRUS LIMON PEEL OIL

CAS NUMBER: 8008-56-8 / 84929-31-7

EINECS NUMBER: 284-515-8

MANUFACTURING METHOD: EXPRESSED SHELF LIFE / BEST BEFORE: 24 MONTHS

ANALYTICAL DETAILS	RANGE
Appearance	LIQUID
Colour	Colourless — Yellow - green
Odour	Characteristic, Fresh Lemon
SPECIFIC GRAVITY @ 25°C	0.840 – 0.870
Refractive Index @ 20°C	1.465 – 1.478
OPTICAL ROTATION (°C)	+55.0 to +85.0

#### **STORAGE CONDITIONS**

STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

**DOCUMENTATION REVIEW DATE:** 

2021



### **Vegetarian & Vegan Suitability Statement**

PRODUCT NAME: Lemon, Essential Oil 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.

12/02/18