CERTIFICATE OF ANALYSIS

PRODUCT NAME: RAVENSARA, ESSENTIAL OIL

Lot Number:4489401 Product Inci: Ravensara Aromatica Oil

PRODUCT CODE: OERAVE

CAS NUMBER: 91770-56-8

EINECS NUMBER: 294-842-8

MANUFACTURING METHOD: STEAM DISTILLATION

Best Before End: DECEMBER 2025

ANALYTICAL DETAILS	Range	RESULTS
Appearance	LIQUID	-
COLOUR	COLOURLESS – PALE YELLOW	-
Odour	CHARACTERISTIC	-
Specific Gravity @ 20°C	0.870 - 0.930	0.898
Refractive Index @ 20°C	1.450 - 1.490	1.472
OPTICAL ROTATION (°C)	-20.0 то -5.0	-9.8

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

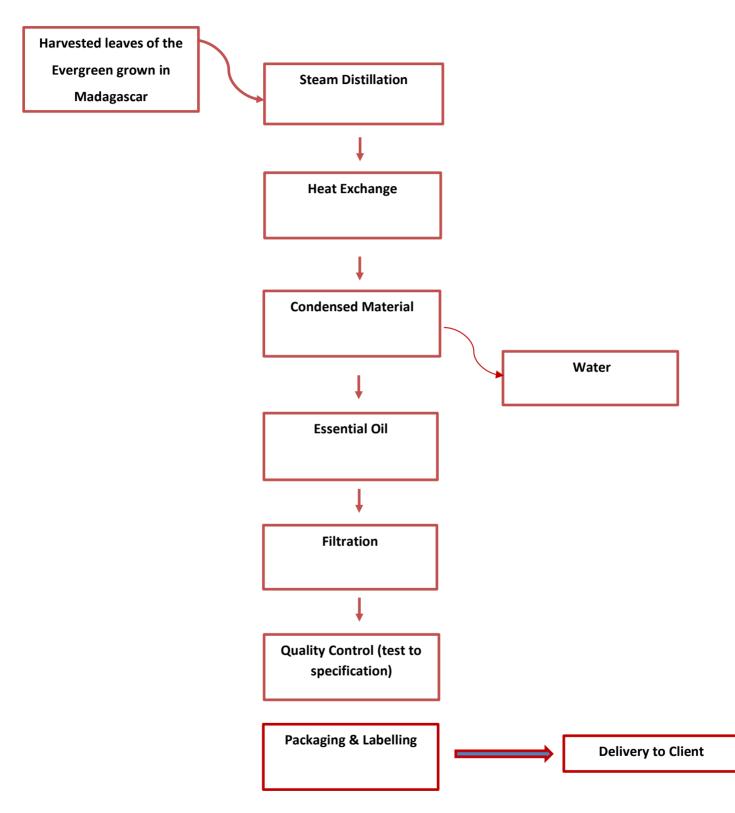
	Ravensara, Essential Oil			
INCI:	Ravensara Aromatica Leaf			
	COSMETIC ALLERGENS			
The Fo	Nowing is from the 7th amendment of the cosmetic directive of the European Union Annex iii.			
nex Illa Reference:		CAS NUMBER:	TOTAL ALLERGEN INCLUSION (%):	
67	AMYL CINNAMAL	122-40-7	0.00	
68	BENZYL ALCOHOL	100-51-6	0.00	
69	CINNAMYL ALCOHOL	104-54-1	0.00	
70	CITRAL	5392-40-5	0.00	
71	EUGENOL	97-53-0	<0.09	
72	HYDROXY-CITRONELLAL	107-75-5	0.00	
73	ISOEUGENOL	97-54-1	0.00	
74	AMYLCIN-NAMYL ALCOHOL	101-85-9	0.00	
75	BENZYL SALICYLATE	118-58-1	0.00	
76	CINNAMAL	104-55-2	0.00	
77	COUMARIN	91-64-5	0.00	
78	GERANIOL	106-24-1	<0.13	
79	HYDROXY- METHYLPENTYLCYCLOHEXENECARBOXALDEHYDE	31906-04-4	0.00	
		105-13-5		
80	ANISE ALCOHOL		0.00	
81	BENZYL CINNAMATE	103-41-3	0.00	
82	FARNESOL	4602-84-0	0.00	
83	BUTYLPHENYL METHYLPROPIONAL	80-54-6	0.00	
84	LINALOOL	78-70-6	<3.36	
85	BENZYL BENZOATE	120-51-4	0.00	
86	CITRONELLOL	106-22-9	0.00	
87	HEXYL CINNAM-ALDEHYDE	101-86-0	0.00	
88	LIMONENE	5989-27-5	<12.08	
89	METHYL HEPTIN CARBONATE	111-12-6	0.00	
90	ALPHA-ISOMETHYL IONONE	127-51-5	0.00	
91	EVERNIA PRUNASTRI EXTRACT	90028-68-5	0.00	
92	EVERNIA FURFURACEA EXTRACT	90028-67-4	0.00	
	FOOD ALLERGENS			
	n directive 2007/68/EC of 27th November 2007 amending Annex Na to Directive 200/13/EC of the European Parki			
nex Illa Reference:		PRESENT IN PRODUCT:	CONTAMINATION PRESENCE:	FACTORY 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:

We hereby confirm the following composition breakdown & manufacturing process flow;

Ravensara, Essential Oil

INCI Name	% Inclusion	CAS Number
Ravensara Aromatica	100	91770-56-8



GMO Statement

PRODUCT NAME: Ravensara Wild

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

06/03/2019

IFRA STATEMENT

PRODUCT NAME: RAVENSARA, ESSENTIAL OIL

PRODUCT INCI: RAVENSARA AROMATICA

PRODUCT CODE: OERAVE

CAS NUMBER: 91770-56-8

EINECS NUMBER: 294-842-8

MANUFACTURING METHOD: STEAM DISTILLATION

SHELF LIFE / BEST BEFORE: 36 MONTHS

WE CERTIFY THAT THE ABOVE NAMED MATERIAL CONFORMS TO THE IFRA 48 CODE OF PRACTICE AND CONTAINS THE FOLLOWING RESTRICTED COMPONENTS THAT ARE LISTED IN THE 48^{TH} Amendment of the IFRA Code of Practice:

RESTRICTED COMPONENT	Cas No:	% LEVEL IN PRODUCT	IFRA STANDARD
Limonene	5989-27-5	≤ 12.08	Specification Std
Linalool	78-70-6	≤ 3.36	Specification Std
Eugenol	97-53-5	≤ 0.09	RESTRICTION STDS (NON QRA)
Geraniol	106-24-1	≤ 0.13	RESTRICTION STDS (QRA CAT.)
Benzaldehyde	100-52-7	≤ 0.03	RESTRICTION STDS (QRA CAT.)
Carvone	99-49-0	≤ 0.03	RESTRICTION STDS (QRA CAT.)
Trans-2-Hexenal	6728-25-3	≤ 0.03	RESTRICTION STDS (QRA CAT.)
Methyl Eugenol from naturals	93-15-2	≤ 2.58	RESTRICTION STDS (NON QRA)
Estragole	140-67-0	≤ 2.94	RESTRICTION STDS (NON QRA)
Furfural	98-01-1	≤ 0.03	Restriction Stds (Non QRA)

COMMENTS:

ACCORDING TO COSMETIC REGULATION (EC) NO 1223/2009 ANNEX III METHYL EUGENOL IS RESTRICTED TO A MAXIMUM CONCENTRATION IN A READY TO USE PREPARATION AS FOLLOWS

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. The information is not to be disclosed to others, reproduced or transmitted in whole or in part without permission It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.

FINE FRAGRANCE - 0.01%

EAU DE TOILETTE - 0.004%

FRAGRANCE CREAM - 0.002%

OTHER LEAVE-ON PRODUCTS AND ORAL PRODUCTS - 0.0002%

RINSE-OFF PRODUCTS - 0.001%

IFRA Classes	% Maximum Use Level
Class 1	Not approved.
Class 2	0.016
Class 3A	0.310
Class 3B	0.775
Class 3C	0.016
Class 3D	0.016
Class 4A	0.310
Class 4B	0.775
Class 4C	0.016
Class 4D	0.155
Class 5	0.016
Class 6	Not approved.
Class 7A	0.016
Class 7B	0.016
Class 8A	0.016
Class 8B	0.039
Class 9A	0.039
Class 9B	0.388
Class 9C	0.388
Class 10A	0.388
Class 10B	0.016
Class 11	0.388

Finished product types	IFRA class
Toys; Lip Products of all types (solid and liquid lipsticks, balms, clear or colored etc)	Class 1
Deodorant and Antiperspirant products of all types (spray, stick, roll-on, under-arm and body etc)	Class 2

Hydroalcoholic products applied to recently shaved skin (EdT range)	Class 3.A
Hydroalcoholic products applied to recently shaved skin (fine fragrance range)	Class 3.B
Eye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc) including eye cream. Men's Facial Creams and Balms	Class 3.C
Tampons.	Class 3.D
Hydroalcoholic Products applied to unshaved skin (EdT range). Ingredients of Perfume Kits. Scent Strips for Hydroalcoholic Products, "scratch and sniff", other paper products not mentioned elsewhere for which skin exposure is only incidental (e.g. spectacle cleaning tissues).	Class 4.A
Hydroalcoholic Products applied to unshaved skin (Fine Fragrance range).	Class 4.B
Hair Styling Aids and Hair Sprays of all types (pumps, aerosol sprays, etc); Hair Deodorant. Body Creams, Oils, Lotions of all types (including baby creams, lotions, oils). Fragrance Compounds for Cosmetic Kits, Foot Care Products	Class 4.C
Fragrancing Cream	Class 4.D
Women's Facial Creams/Facial Make-up (excluding eye cream); Facial Masks; Hand Cream Wipes or refreshing tissues for Face, Neck, Hands, Body.	Class 5
Mouthwash, Toothpaste.	Class 6
ntimate Wipes; Baby Wipes.	Class 7 A
Insect Repellent (intended to be applied to the skin).	Class 7 B
Make-up Removers of all types (not including face cleansers). Hair Styling Aids Non-Spray of all types (mousse, gels, leave-in conditioners etc). Nail Care. All Powders & Talcs (including baby powders and talcs).	Class 8
Liquid Soap, Bar Soap (toilet soap); Depilatory; Conditioner (rinse-off), Shampoos of all types (including baby shampoos).Face Cleansers of all types (washes, gels, scrubs, etc).Shaving Creams of all types (stick, gels, foams, etc).Body Washes of all types (including baby washes).Shower Gels of all types; Bath Gels, Foams, Mousses, Salts, Oils and other products added to bathwater	Class 9.A
Feminine hygiene pads / liners.	Class 9.B
Other' Aerosols (including air fresheners sprays but not including deodorant/antiperspirants, hair styling aids spray).	Class 9.C
Hand wash/Machine wash Laundry Detergents of all types (liquid, powder, tablet, etc) including Laundry Bleaches. Other Household Cleaning Products (fabric cleaners, soft surface cleaners, carpet cleaners etc) . Dry Cleaning Kits. Fabric Softeners of all types including fabric softener sheets. Hand Dishwashing Detergent. Hard Surface Cleaners of all types (bathroom and kitchen cleansers, furniture polish etc). Shampoos for pets	Class 10.A
Diapers. Toilet seat wipes.	Class 10.B
All non-skin contact, including: Air Fresheners and fragrancing of all types (excluding aerosol products): plug-ins, solid substrate, membrane delivery; Toilet blocks; Joss Sticks, Incense; Insecticides (mosquito coil, paper, electrical, etcexcluding aerosols); Plastic articles (excluding toys); Candles; Fuels; Paints; Floor wax; Liquid refills for air fresheners (cartridge system)	Class 11.A
All incidental skin contact, including: Machine Dish wash Detergents and Deodorizers. Machine only Laundry Detergents (e.g. liquitabs). Deodorizers/Maskers (e.g. fabric drying machine deodorizers, carpet powder). Pot pourri, fragrancing sachets, liquid refills for air fresheners (non-cartridge systems), etc Shoe polishes; Cat Litter; Animal Sprays (excluding aerosols); Treated Textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics, tights with moisturizers); Odored Distilled Water (that can be added to steam irons).	Class 11.B

Material Safety Data Sheet

EU Regulation: 1907/2006

SECTION 1: IDENTIFICATION OF					
SECTION 1: IDENTIFICATION OF	THE SUBSTANCE	MINIORE	AND OF THE COMPANY	UNDERTAKING	
1.1					
PRODUCT IDENTIFICATION					
Product Name	Ravensara, Essentia	l Oil			
BIOLOGICAL DEFINITION	Ravensara Aromati	ca Leaf Oil is	THE VOLATILE OIL DISTILLED FROM	THE LEAVES OF RAVE	NSARA AROMATICA, LAURACEAE.
INCI NAME	Ravensara Aromati	RAVENSARA AROMATICA			
Synonyms & Trade Names	-				
INTERNAL PRODUCT CODE	OERAVE	OERAVE			
CAS-No	91770-56-8	EC No.	294-842-8	EINECS No.	294-842-8
	1				
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
	MADAR CORPORA	TION LIMITED)		
COMPANY ADDRESS	19-20 SANDLEHEA	TH INDUSTRI	AL ESTATE, FORDINGBRIDGE,	HAMPSHIRE, SP6	1PA
EMAIL	SALES@MADARCORPC	RATION.CO.UK			
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
	01425 655555				

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)	THE FULL TEXT FOR ALL R-PHRASES AND HAZARD STATEMENTS ARE DISPLAYED IN SECTION 16.		
CLASSIFICATION (EU1272/2008)	FLAMMABLE LIQUID, CATEGORY 3 (FLAM. LIQ. 3, H226). SKIN IRRITATION, CATEGORY 2 (SKIN IRRIT. 2, H315). EYE IRRITATION, CATEGORY 2 (EYE IRRIT. 2, H319). SKIN SENSITISATION, CATEGORY 1 (SKIN SENS. 1, H317). GERM CELL MUTAGENICITY, CATEGORY 2 (MUTA. 2, H341). CARCINOGENICITY, CATEGORY 2 (CARC. 2, H351). ASPIRATION HAZARD, CATEGORY 1 (ASP. TOX. 1, H304). 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 GHS08 GHS09 GHS02 GHS02		
Signal Word	DANGER.		
Contains	601-029-00-7 (R)-P-MENTHA-1,8-DIENE EC 205-427-8 ESTRAGOLE EC 236-719-3 DELTA-3-CARENE EC 201-291-9 ALPHA-PINENE X EC 204-622-5 MYRCENE EC 202-223-0 EUGENYL METHYL ETHER (METHYL EUGENOL) EC 202-872-5 B-PINENE EC 201-746-1 BETA-CARYOPHYLLENE EC 202-792-5 A-PHELLANDRENE EC 202-794-6 G-TERPINENE EC 202-795-1 P-MENTHA-1,3-DIENE (SEE ALPHA-TERPINENE)		
HAZARDS STATEMENT	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. H341 SUSPECTED OF CAUSING GENETIC DEFECTS. H351 SUSPECTED OF CAUSING CANCER. 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 P301 + P310 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. P303 + P361 + P353 IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. P305 + P351 + P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.		
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	MAY BE HARMFUL IN CONTACT WITH SKIN.		
PBT OR VPVB ACCORDING TO ANNEX XIII	The substance does not satisfy the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 1907/2006		

2.5 - 10.0% DELTA-3-CARENE CAS: 13466-78-9, EC: 236-719-3 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304, FLAM. Lio. 3, H226, Skin Irent. 2, H315, Skin Sens. 1, H31 2.5 - 10.0% ALPHA-PINENE CAS-No.: 80-56-8 EC No.: 201-291-9 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304, FLAM. Lio. 3, H226, Skin Irent. 2, H315, Skin Sens. 1, H31 2.5 - 10.0% MIRCENE CAS: 78-70-6, EC: 201-134-4 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304, FLAM. Lio. 3, H226, Skin Irent. 2, H315 2.5 - 10.0% MYRCENE CAS: 123-35-3, EC: 204-622-5 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304, FVE Irent. 2, H319, FLAM. Lio. 3, H226, Skin Irent. 2, H315 2.5 - 10.0% 4-TERPINENOL CAS: 562-74-3, EC: 209-235-5 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304, EVE Irent. 2, H319, Skin Irent. 2, H315 2.5 - 10.0% EUGENYL METHYL ETHER (METHYL EUGENOL) CAS: 93-15-2, EC: 202-223-0 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304, ZEE IRENT. 2, H319, Skin Irent. 2, H315 2.5 - 10.0% BUENENE CAS: 127-91-3, EC: 204-872-5 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304, ZEE IRENT. 2, H315, Skin Sens. 1, H31 2.5 - 10.0% BUENENE CAS: 87-44-5, EC: 201-746-1 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304 2.5 - 10.0% BETA-CARYOMYTLENE CAS: 87-44-5, EC: 201-746-1 CLASSIFICATION (EC 1272/2008) ASP. Tox. 1, H304 2.5 - 10.0% A-PHELLANDRENE CAS: 99-83-2, EC: 202-792-5 CLASSIFICATION (EC 1272/2008) ASP. To

 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. 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)	Inhalation May cause coughing and difficulties in breathing. Ingestion Irritating to the respiratory tract and may cause damage to the central nervous system. Skin contact Toxic in contact with skin. Eye contact May cause eye irritation.		
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	NONE EXPECTED, SEE SECTION 4.1 FOR FURTHER INFORMATION.		

SECTION 5: FIRE FIGHTING MEASURES

FOAM, CO2, DRY CHEMICAL POWDER.
TOAM, CO2, DRT Chemical FOWDer.
BURNING PRODUCES IRRITATING, TOXIC AND OBNOXIOUS FUMES
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:
WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING.

SECTION 6: ACCIDENTAL RELEASE MEASURE ENSURE ADEQUATE VENTILATION OF THE WORKING AREA, EVACUATE PERSONNEL TO SAFE AREA, WEAR SUITABLE PROTECTIVE 6.1 EQUIPMENT. NO SMOKING, SPARKS, FLAMES OR OTHER SOURCES OF IGNITION NEAR SPILLAGE. AVOID CONTACT WITH SKIN, **PERSONAL PRECAUTIONS** EYES AND CLOTHING. 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. UP 6.4 REFER & CONSIDER SECTION 8. **REFERENCES TO OTHER SECTIONS** 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 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	

OCCUPATIONAL EXPOSURE LIMITS : ACGIH TLV (AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS, THRESHOLD LIMIT VALUES, 2010) : CAS TWA: STEL : CEILING : DEFINITION : CRITERIA : 8.1 13466-78-9 20 ppm ----CONTROL PARAMETERS 80-56-8 20 ppm ----127-91-3 20 ppm --_ -

8.2 Exposure Controls	
	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.
HAND PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.
RESPIRATORY EQUIPMENT	NO DATA
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.
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	Clear
COLOUR	COLOURLESS - YELLOW
Odour	CHARACTERISTIC
RELATIVE DENSITY	0.870 – 0.930 @ 20°C
Flash Point (°C)	>50°C
REFRACTIVE INDEX @ 20 °C	1.450 – 1.490 @ 20°C
Solubility in water @ 20 °C	INSOLUBLE IN WATER
9.2 Other Information	ΝΟ ΔΑΤΑ
SECTION 10: STABILITY & REACTIVITY	
10.1 Reactivity	NO HAZARDOUS REACTIONS IF STORED AND HANDLED AS PRESCRIBED / INDICATED.
10.2 Chemical stability	Stable under suggested storage conditions (<15 $^{\circ}$ 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	STRONG OXIDISNING SUBSTANCES.
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

TOXICOLOGICAL EFFECTS	P-MENTHA-1,3-DIENE (SEE ALPHA-TERPINENE) (CAS: 99-86-5) Oral route : LD50 = 1680 mg/kg		
	G-TERPINENE (CAS: 99-85-4) Oral route : LD50 = 3850 mg/kg		
	EUCALYPTOL (CAS: 470-82-6) Oral route : LD50 = 2480 mg/kg		
	EUGENYL METHYL ETHER (METHYL EUGENOL) (CAS: 93-15-2) Oral route : LD50 = 810 mg/kg		
Αсυτε Τοχιςιτγ	4-TERPINENOL (CAS: 562-74-3) Oral Route : LD50 = 1300 mg/kg Dermal Route : LD50 = 2500 mg/kg		
	LINALOOL (CAS: 78-70-6) Oral route : LD50 = 3000 mg/kg		
	ALPHA-PINENE X (CAS: 80-56-8) Oral route : LD50 = 3700 mg/kg		
	DELTA-3-CARENE (CAS: 13466-78-9) Oral route : LD50 = 4800 mg/kg		
	ESTRAGOLE (CAS: 140-67-0) Oral route : LD50 = 1230 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. MAY CAUSE AN ALLERGIC REACTION BY SKIN CONTACT.		
Eye damage or irritation	CAUSES EYE DAMAGE		
R ESPIRATORY OR SKIN SENSITIVITY	No Data		
GERM CELL MUTAGENICITY	CAUSE FOR CONCERN OWING TO THE POSSIBILITY THAT IT MAY INDUCE HERITABLE MUTATIONS IN THE GERM CELLS OF HUMANS.		
CARCINOGENICITY	Suspected human carcinogen.		
R EPRODUCTIVE TOXICITY			
STOT – SINGLE EXPOSURE	NOT APPLICABLE.		
STOT – REPEATED EXPOSURE	NOT APPLICABLE.		
Aspiration Hazard	ASPIRATION TOXICITY INCLUDES SEVERE ACUTE EFFECTS SUCH AS CHEMICAL PNEUMONIA, VARYING DEGREES OF PULMONARY INJURY OR DEATH FOLLOWING ASPIRATION.		
Other information	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAS 93-15-2 : IARC GROUP 2B : THE AGENT IS POSSIBLY CARCINOGENIC TO HUMANS. CAS 5989-27-5 : IARC GROUP 3 : THE AGENT IS NOT CLASSIFIABLE AS TO ITS CARCINOGENICITY TO HUMANS		
SECTION 12: ECOLOGICAL INFORMATION			
12.1 Τοχιατγ	TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.		
12.2 Persistence & degradability	ΝΟ ΔΑΤΑ		
12.3 BIO- ACCUMULATIVE POTENTIAL	ΝΟ ΔΑΤΑ		
12.4 Mobility in soil	NO DATA.		
12.5 Results of PBT & VPVB assessment	NO DATA.		

RESULTS OF PBT & VPVB ASSESSMENT

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	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		
	ROAD: 1169	
UN NUMBER	RAIL: 1169	
	AIR: 1169	
14.2 UN Shipping Name	Extracts, aromatic, liquid.	
	ADR/RID/ADN CLASS 3 IMDG CLASS 3 ICAO CLASS/DIVISION 3	
14.3 TRANSPORT HAZARD CLASS(ES)	FLAMMABLE 3	
14.4	ADR/RID/ADN PACKING GROUP III	
PACKING GROUP	IMDG PACKING GROUP III	
	ICAO PACKING GROUP III	
14.5 Enviromental Hazards	ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT.	

	ADR/RII)									
	Class	Code	Pack	gr.	Label	ldent.	LQ	Provis.	EQ	Cat.	Tunnel
	3	F1	ш		3	30	5 L	601 640E	E1	3	D/E
	IMDG Class	2° Label		Pack gr.	LQ	EMS	Prov	vic	EQ		
	3	-		III	5 L	F-E,S-D		955	EQ E1		
14.6 Special precautions for user	ΙΑΤΑ										
	Class	2°Label		Pack gr.	Passa	ager Pa	assager	Cargo	Cargo	note	EQ
	3	-		ш	355	6	0 L	366	220 L	A3	E1
	3	-		III	Y344	1	0 L	-	-	A3	E1.
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE. SECTION 15: REGULATORY INFORMATION		ted quantiti epted quant TA.									6
15.1 PRODUCT SPECIFIC SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS & LEGISLATION											
EU Directives	DECEME CHEMIC 1999/ REGULA	als (REAC) 45/EC an tion (EC) 1	CONC H), EST ID REPE NO14	ERNING TABLISHIN FALING C 88/94	THE REGIS NG A EURO OUNCIL R AS WELL A	TRATION, E OPEAN CHI EGULATION AS COUNC	VALUATI EMICALS I (EEC) IL DIRECT	ION, AUTH AGENCY, NO793/9 TIVE 76/70	DRIZATION AMENDING 23 & COA 69/EEC 8	N & RESTR G DIRECT MMISSION & COMM	RICTION OF
STATUTORY INSTRUMENTS	The Ch No 71	EMICALS (H.	AZARD		ATION &	PACKAGIN	IG FOR	SUPPLY REG	GULATION	is 2009	(S.I.2009
Approved Code of Practice	CLASSIFICATION & LABELLING OF SUBSTANCES & PREPARATIONS DANGEROUS FOR SUPPLY. SAFETY DATA SHEETS FOR SUBSTANCES & PREPARATIONS.					Safety data					
GUIDANCE NOTES	WORK	PLACE EXPO	SURE L	IMITS EH	40. CHIF	FOR EVER	YONE H	SG 108.			
15.2 Chemical Safety Assessment	-										

SECTION 16: OTHER INFORMATION				
Hazard and/ or Precautionary Statements in full	H226 Flammable Liquid and Vapour. H228 Flammable Solid. H302 Harmful if Swallowed. 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. H341 Suspected of causing genetic defects.			

H351 SUSPECTED OF CAUSING CANCER. 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.	H400 VERY TOXIC TO AQUATIC LIFE. H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
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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

SPECIFICATION SHEET

PRODUCT NAME: RAVENSARA, ESSENTIAL OIL

PRODUCT INCI: RAVENSARA AROMATICA PRODUCT CODE: OERAVE CAS NUMBER: 91770-56-8 EINECS NUMBER: 294-842-8 MANUFACTURING METHOD: STEAM DISTILLATION SHELF LIFE / BEST BEFORE: 24 MONTHS

ANALYTICAL DETAILS	RANGE
Appearance	LIQUID
COLOUR	Colourless – Pale Yellow
Odour	CHARACTERISTIC
Specific Gravity @ 20°C	0.970 – 0.930
Refractive Index @ 20°C	1.450 – 1.490
OPTICAL ROTATION (°C)	-20.0 то -5.0

STORAGE CONDITIONS

Store in a cool dry place away from heat & sunlight

DOCUMENTATION REVIEW DATE:

24th May 2018

Vegetarian & Vegan Suitability Statement

PRODUCT NAME: Ravensara Wild

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.

28/06/19