

CERTIFICATE OF ANALYSIS

PRODUCT NAME: RAVENSARA, ESSENTIAL OIL ORGANIC

BATCH NUMBER: 4389603

PRODUCT INCI: RAVENSARA AROMATICA OIL

CAS NUMBER: 91770-56-8 EINECS NUMBER: 294-842-8

MANUFACTURING METHOD: STEAM DISTILLATION

BEST BEFORE DATE: MARCH 2023

| Analytical Details | Range | RESULTS |
|-------------------------|--------------------------|---------|
| Appearance | LIQUID | - |
| Colour | Colourless – Pale Yellow | - |
| Odour | CHARACTERISTIC | - |
| Specific Gravity @ 20°C | 0.870 - 0.930 | 0.9074 |
| Refractive Index @ 20°C | 1.450 – 1.490 | 1.4648 |
| OPTICAL ROTATION (°C) | -20.0 то -5.0 | -17.89 |

STORAGE CONDITIONS

STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT



PRODUCT NAME: Ravensara, Essential Oil Organic INCI: Ravensara Aromatica Leaf COSMETIC ALLERGENS The Following is from the 7th amendment of the cosmetic directive of the European Union Annex iii. Annex Illa Reference: CAS NUMBER: TOTAL ALLERGEN INCLUSION (%): AMYL CINNAMAL 122-40-7 0.00 68 BENZYL ALCOHOL 100-51-6 0.00 69 CINNAMYI 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 ISOFUGENOL 73 97-54-1 0.00 74 AMYLCIN-NAMYL ALCOHOL 101-85-9 0.00 75 BENZYL SALICYLATE 118-58-1 CINNAMAL 104-55-2 76 0.00 COUMARIN 77 91-64-5 0.00 78 GERANIOL 106-24-1 < 0.13 HYDROXY- METHYLPENTYLCYCLOHEXENECARBOXALDEHYDE 31906-04-4 79 0.00 ลา ANISE ALCOHOL 105-13-5 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 87 HEXYL CINNAM-ALDEHYDE 101-86-0 0.00 5989-27-5 88 LIMONENE <12.08 89 METHYL HEPTIN CARBONATE 111-12-6 0.00 0.00 90 ALPHA-ISOMETHYL IONONE 127-51-5 EVERNIA PRUNASTRI EXTRACT 91 90028-68-5 0.00 92 EVERNIA FURFURACEA EXTRACT 90028-67-4 0.00 FOOD ALLERGENS The following is from the commission directive 2007/68/EC of 27th November 2007 amending Annex IIIa to Directive 200/13/EC of the European Parliament & Council with regards to specific food ingredient PRESENT IN PRODUCT: CONTAMINATION PRESENCE: FACTORY PRESENCE: Annex Illa Reference: CEREALS (CONTAINING GLUTEN YES NO NO 1 CRUSTACEANS NO NO NO EGGS NO NO FISH NO NO NO PEANUTS NO NO YES SOYA NO NO YES MILK NO YES NUTS NO NO YES CELERY & CELERIAC NO NO q VES 10 MUSTARD NO NO YES 11 SESAME NO NO YES 12 SULPHUR DIOXIDE & SULPHITES NO NO NO 13 LUPIN NO NO NO MOLLUSC NO This product is NOT food grade



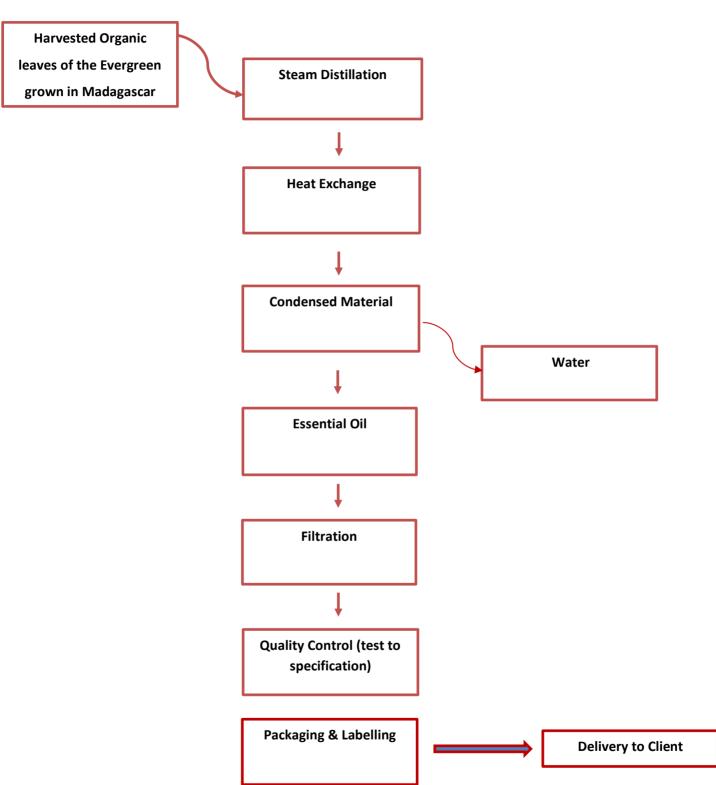
Composition Statement & Manufacturing Flow Chart:

Madar Corporation can hereby confirm the following composition breakdown & manufacturing process flow;

Ravensara, Essential Oil Organic

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







GMO Statement

PRODUCT NAME: Ravensara Organic

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

14/05/2019



IFRA STATEMENT

PRODUCT NAME: RAVENSARA, ESSENTIAL OIL ORGANIC

PRODUCT INCI: RAVENSARA AROMATICA

CAS NUMBER: 91770-56-8 EINECS NUMBER: 294-842-8

MANUFACTURING METHOD: STEAM DISTILLATION

SHELF LIFE / BEST BEFORE: 24 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 48TH 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 |



| lydroalcoholic products applied to recently shaved skin (EdT range) | Class 3.A |
|---|------------|
| lydroalcoholic products applied to recently shaved skin (fine fragrance range) | Class 3.B |
| ye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc) including eye cream. Men's Facial Creams and Balms | Class 3.C |
| ampons. | 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 |
| lydroalcoholic Products applied to unshaved skin (Fine Fragrance range). | Class 4.B |
| dair Styling Aids and Hair Sprays of all types (pumps, aerosol sprays, etc); Hair Deodorant. Body Creams, Oils, otions of all types (including baby creams, lotions, oils). Fragrance Compounds for Cosmetic Kits, Foot Care Products | Class 4.C |
| ragrancing Cream | Class 4.D |
| Nomen's Facial Creams/Facial Make-up (excluding eye cream); Facial Masks; Hand Cream Nipes or refreshing tissues for Face, Neck, Hands, Body. | Class 5 |
| Nouthwash, Toothpaste. | Class 6 |
| ntimate Wipes; Baby Wipes. | Class 7 A |
| nsect 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, eave-in conditioners etc). Nail Care. All Powders & Talcs (including baby powders and talcs). | Class 8 |
| iquid Soap, Bar Soap (toilet soap); Depilatory; Conditioner (rinse-off), Shampoos of all types (including baby hampoos).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, Dils and other products added to bathwater | Class 9.A |
| eminine 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: Aachine 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, iquid refills for air fresheners (non-cartridge systems), etc Shoe polishes; Cat Litter; Animal Sprays (excluding serosols); Treated Textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or abrics, 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 | THE SUBSTANCE | MIXTURE | AND OF THE COMPANY/ | UNDERTAKING | |
|--|---|--|-----------------------------------|---------------------|-----------------------------|
| 1.1 PRODUCT IDENTIFICATION | | | | | |
| PRODUCT NAME | RAVENSARA, ESSENTIA | l Oil Organi | С | | |
| BIOLOGICAL DEFINITION | RAVENSARA AROMATI | CA L EAF OIL IS | THE VOLATILE OIL DISTILLED FROM 1 | THE LEAVES OF RAVEN | ISARA AROMATICA, LAURACEAE. |
| INCI NAME | Ravensara Aromati | CA | | | |
| SYNONYMS & TRADE NAMES | - | | | | |
| INTERNAL PRODUCT CODE | | | | | |
| CAS-No | 91770-56-8 | 91770-56-8 EC No. 294-842-8 EINECS No. 294-842-8 | | 294-842-8 | |
| | | | | | |
| 1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DAT | A SHEET | | | | |
| COMPANY ADDRESS | Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA | | | | |
| EMAIL | technical@madarcorpo | ation.co.uk | | | |
| 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET | | | | | |
| EMERGENCY CONTACTS | 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 |
| 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 204-872-5 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 |

SECTION 3: COMPOSITION OF INGREDIENTS 10.0 - 25.0% (R)-P-MENTHA-1,8-DIENE CAS: 5989-27-5, EC: 227-813-5 CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3, H226, SKIN IRRIT. 2, H315, SKIN SENS. 1, H317, AQUATIC ACUTE 1, H400 M ACUTE = 1, AQUATIC CHRONIC 1, H410, M CHRONIC = 1 10.0 - 25.0% 4(10)-THUJENE CAS: 3387-41-5, EC: 222-212-4 CLASSIFICATION (EC 1272/2008) 2.5 - 10.0% ESTRAGOLE CAS: 140-67-0, EC: 205-427-8 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4, H302, CARC. 2, H351, MUTA. 2, H341, SKIN SENS. 1, H317 2.5 - 10.0% DELTA-3-CARENE CAS: 13466-78-9, EC: 236-719-3 CLASSIFICATION (EC 1272/2008) ASP. TOX. 1, H304, FLAM. LIQ. 3, H226, SKIN IRRIT. 2, H315, SKIN SENS. 1, H317 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. LIQ. 3, H226, SKIN IRRIT. 2, H315, SKIN SENS. 1, H317 2.5 - 10.0% LINALOOL CAS: 78-70-6, EC: 201-134-4 CLASSIFICATION (EC 1272/2008) EYE IRRIT. 2, H319, SKIN IRRIT. 2, H315 2.5 - 10.0% MYRCENE CAS: 123-35-3, EC: 204-622-5 CLASSIFICATION (EC 1272/2008) ASP. TOX. 1, H304, EYE IRRIT. 2, H319, FLAM. LIQ. 3, H226, SKIN IRRIT. 2, H315 2.5 - 10.0% 4-TERPINENOL CAS: 562-74-3, EC: 209-235-5 CLASSIFICATION (EC 1272/2008); ACUTE TOX. 4, H302, EYE IRRIT. 2, H319, SKIN IRRIT. 2, H315 2.5 - 10.0% EUGENYL METHYL ETHER (METHYL EUGENOL) CAS: 93-15-2, EC: 202-223-0 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4, H302, CARC. 2, H351, MUTA. 2, H341 3.2 MIXTURES **2.5 – 10.0% B-PINENE** CAS: 127-91-3, EC: 204-872-5 CLASSIFICATION (EC 1272/2008) ASP. TOX. 1, H304, FLAM. LIQ. 3, H226, SKIN IRRIT. 2, H315, SKIN SENS. 1, H317 2.5 - 10.0% EUCALYPTOL CAS: 87-44-5, EC: 201-746-1 CLASSIFICATION (EC 1272/2008) ASP. TOX. 1, H304 2.5 - 10.0% BETA-CARYOPHYLLENE 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. TOX. 1, H304, FLAM. LIQ. 3, H226 <2.5% G-TERPINENE CAS: 99-85-4, EC: 202-794-6 CLASSIFICATION (EC 1272/2008) ASP. TOX. 1, H304, FLAM. LIQ. 3, H226 <2.5% CAMPHENE CAS: 79-92-5, EC: 201-234-8 CLASSIFICATION (EC 1 272/2008) EYE IRRIT. 2, H319, AQUATIC ACUTE 1, H400, M ACUTE = 1, AQUATIC CHRONIC 1, H410 M CHRONIC = 1

| SECTION 4: FIRST AID MEASURES | |
|-------------------------------|--|
| 4.1 | |

<2.5% P-MENTHA-1,3-DIENE (SEE ALPHA-TERPINENE) CAS: 99-86-5, EC: 202-795-1

CLASSIFICATION (EC 1272/2008) ASP. TOX. 1, H304, ACUTE TOX. 4, H302, AQUATIC CHRONIC 2, H411, FLAM. LIQ. 3,

H226



| 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. | |

| SPECIAL TREATMENT REQUIRED | | | |
|--|---|--|--|
| | | | |
| SECTION 5: FIRE FIGHTING MEASURES | | | |
| JEGITOR STREET FORTING MEASURES | | | |
| | | | |
| 5.1 | FOAM, CO2, DRY CHEMICAL POWDER. | | |
| EXTINGUISHING MATERIAL | | | |
| 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR | PURNISHE PRODUCTS INSTATING TOYIC AND ORNOVIOUS SHAFE | | |
| MIXTURE | BURNING PRODUCES IRRITATING, TOXIC AND OBNOXIOUS FUMES | | |
| 5.3 | SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: | | |
| Advice for fire-fighters | WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING. | | |
| | | | |
| | | | |
| | | | |
| SECTION 6: ACCIDENTAL RELEASE MEASU | tE | | |
| | | | |
| | 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 | PENDOVE ICANTRION COURSES PROVIDE APPOINTENT ATOM ANOTHER VESTER BUILDING CONTAIN | | |
| METHODS & MATERIAL FOR CONTAINMENT AND CLEANING | 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. | | |
| UP | | | |
| 6.4 | REFER & CONSIDER SECTION 8. | | |
| REFERENCES TO OTHER SECTIONS | REFER & CONSIDER SECTION 13. | | |
| | | | |
| SECTION 7: HANDLING & STORAGE | | | |
| | | | |
| | | | |
| | HANDLE IN ACCORDANCE WITH GOOD HYGIENE AND SAFETY PRACTICE. KEEP AWAY FROM HEAT, SPARKS, OPEN FLAMES AND | | |
| 7.1 | HOT SURFACES NO SMOKING. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. USE IN ACCORDANCE WITH GOOD | | |
| PRECAUTIONS FOR SAFE-HANDLING | MANUFACTURING AND INDUSTRIAL HYGIENE PRACTICES. USE IN AREAS WITH ADEQUATE VENTILATION DO NOT EAT, DRINK OR | | |
| | SMOKE WHEN USING THIS PRODUCT. | | |
| | | | |
| 7.2 | KEEP THE PRODUCT CONTAINER TIGHTLY CLOSED, IN A DRY, VENTILATED AREA. KEEP AWAY FROM POTENTIAL SOURCES OF | | |
| CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES | IGNITION AND PROTECTED FROM LIGHT, MAINTAIN LIMITED CONTACT WITH OXYGEN. | | |
| INCOMPATIBILITIES | I GAMINATO I KOTECID I KOM BOM MANAMALIMID BOMACI MIII OATODA | | |
| 7.3 | No Duti | | |
| 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): | | |
| 0.1 | CAS TWA: STEL: CEILING: DEFINITION: CRITERIA: | | |
| 8.1 CONTROL PARAMETERS | 13466-78-9 20 PPM | | |
| CONTROL FARAMETERS | 80-56-8 20 PPM | | |
| | 127-91-3 20 PPM | | |
| | | | |





| EYE PROTECTION | 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 | NO DATA |

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



| 11.1 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 | | | |
| Αςυτε Τοχιςτιγ | 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. | | | |
| EYE DAMAGE OR IRRITATION | MAY CAUSE AN ALLERGIC REACTION BY SKIN CONTACT. CAUSES EYE DAMAGE | | | |
| RESPIRATORY 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. | | | |
| REPRODUCTIVE TOXICITY | NOT APPLICABLE. | | | |
| 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. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. | | | |
| OTHER INFORMATION | 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 | | | |
| | Homerical | | | |
| SECTION 12: ECOLOGICAL INFORMATION | | | | |
| 12.1 TOXICITY | TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. | | | |
| 12.2 PERSISTENCE & DEGRADABILITY | NO DATA | | | |
| 12.3 BIO- ACCUMULATIVE POTENTIAL | NO DATA | | | |
| 12.4 Mobility in soil | NO DATA. | | | |
| 12.5 RESULTS OF PBT & VPVB ASSESSMENT | NO DATA. | | | |



| 12.6 OTHER ADVERSE EFFECTS | 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. | | | |

| 14.1 Transport Information | | | |
|---------------------------------|---|--|--|
| UN NUMBER | ROAD: 1169 RAIL: 1169 AIR: 1169 | | |
| 14.2 UN SHIPPING NAME | Extracts, aromatic, liquid. | | |
| 14.3 TRANSPORT HAZARD CLASS(ES) | ADR/RID/ADN CLASS 3 IMDG CLASS 3 ICAO CLASS/DIVISION 3 | | |
| 14.4 PACKING GROUP | ADR/RID/ADN PACKING GROUP III IMDG PACKING GROUP III ICAO PACKING GROUP III | | |
| 14.5 Enviromental Hazards | ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT. | | |

| | ADR/RII |) | | | | | | | | | |
|--|--|--|--------|----------|----------|------------|-----------|------------|----------|---------|-------------|
| | Class | Code | Pack | gr. | Label | Ident. | LQ | Provis. | EQ | Cat | Tunnel |
| | 3 | F1 | III | | 3 | 30 | 5 L | 601 640E | E1 | 3 | D/E |
| | | | | | | | | | | | |
| | IMDG | | | | | | | | | | |
| | Class | 2° Label | | Pack gr. | LQ | EMS | Prov | ris. | EQ | | |
| | 3 | _ | | III | 5 L | F-E,S-D | | 955 | E1 | | |
| | | | | | | ,- | | | | | |
| 14.6 SPECIAL PRECAUTIONS FOR USER | IATA | | | | | | | | | | |
| | Class | 2°Label | | Pack gr. | Passa | iger Pa | ssager | Cargo | Cargo | note | EQ |
| | 3 | _ | | III | 355 | - |) L | 366 | 220 L | A3 | E1 |
| | 3 | - | | III | Y344 | . 10 | 0 L | _ | - | A3 | E1. |
| | | | | | | | | | | | |
| | For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG. | | | | | | | | | | |
| | | epted quant | | | | | | | | | |
| | | | | | | | | | | | |
| 14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC | | | | | | | | | | | |
| CODE. | No Da | TA. | | | | | | | | | |
| SECTION 15: REGULATORY INFORMATION | | | | | | | | | | | |
| | | | | | | | | | | | |
| 15.1 PRODUCT SPECIFIC SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS & LEGISLATION | | | | | | | | | | | |
| | REGULA | TION (EC) | No 19 | 907/20 | 06 OF TH | E EUROPEA | N PARL | IAMENT AN | D OF THE | COUNCI | L OF 18™ |
| | DECEMBER 2006. CONCERNING THE REGISTRATION, EVALUATION, AUTHORIZATION & RESTRICTION OF | | | | | | | | | | |
| EU DIRECTIVES | 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 | | | | | | | | | |
| | | | | | | | | | | | MENDMENTS). |
| STATUTORY INSTRUMENTS | THE CH No 71 | emicals (H 6). | AZARD | INFORM | & NOITA | Packagin | IG FOR \$ | SUPPLY REC | GULATION | ıs 2009 | (S.I.2009 |
| Approved Code of Practice | | | LABELL | ING OF | SUBSTANC | ES & PREPA | ARATION | NS DANGER | OUS FOR | SUPPLY. | SAFETY DATA |
| | | FOR SUBSTA | | | | | | | | | |
| GUIDANCE NOTES 15.2 | WORK | PLACE EXPO | SURE L | IMITS EH | 40. CHIP | FOR EVER | YONE H | SG 108. | | | |
| 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. | | | |
| 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 | | | |
| ADI | 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 TH APRIL 2018 | Data Launch |



SPECIFICATION SHEET

PRODUCT NAME: RAVENSARA, ESSENTIAL OIL ORGANIC

PRODUCT INCI: RAVENSARA AROMATICA

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 | 0.870 – 0.900 | | | |
| REFRACTIVE INDEX @ 20°C | 1.480 – 1.489 | | | |
| OPTICAL ROTATION (°C) | -35.0 то -20.0 | | | |

STORAGE CONDITIONS

STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

DOCUMENTATION REVIEW DATE:

24[™] May 2018



Vegetarian & Vegan Suitability Statement

PRODUCT NAME: Ravensara 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.

14/05/19