

# <u>CERTIFICATE OF ANALYSIS</u> <u>ORGANIC GREEN MANDARIN OIL</u>

| Batch No:       | 4388609       |
|-----------------|---------------|
| Date of Expiry: | February 2023 |

Appearance @ 20°C: A clear, coloured liquid

Odour: Characteristic

| TEST                           | SPECIFICATION   | ANALYSIS                              |
|--------------------------------|-----------------|---------------------------------------|
| Relative Density @ 20°C (g/ml) | 0.839 - 0.849   | 0.845                                 |
| Refractive Index @ 20°C        | 1.468 – 1.478   | 1.473                                 |
| Optical Rotation @ 20°C        | +68.0 to +83.0° | +74.8°                                |
| Peroxides (mmol/l)             | < 20.0          | 10.0 (at time of production analysis) |



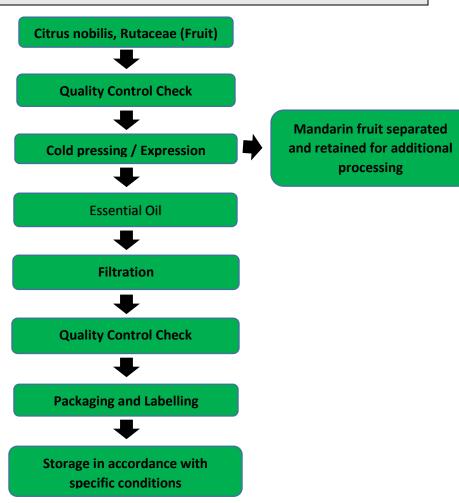
| Product Nai | me         | Organic Green Mandarin Oil        |  |  |   |
|-------------|------------|-----------------------------------|--|--|---|
| INCI Name   |            | Citrus Nobilis Peel Oil Expressed |  |  |   |
| Date        | 26/06/2019 | Product Code Revision 1           |  |  | 1 |

| Material                                     | Cas Number | Cosmetic Allergens<br>Inclusion (%) |  |
|--|------------|-------------------------------------|--|
| ALPHA-ISOMETHYLIONONE                        | 127-51-5   |                                     |  |
| AMYL CINNAMAL                                | 122-40-7   | -                                   |  |
| AMYL CINNAMYL ALCOHOL                        | 101-85-9   | -                                   |  |
| ANISE ALCOHOL                                | 105-13-5   | -                                   |  |
| BENZYL ALCOHOL                               | 100-51-6   | -                                   |  |
| BENZYL BENZOATE                              | 120-51-4   | -                                   |  |
| BENZYL CINNAMATE                             | 103-41-3   | -                                   |  |
| BENZYL SALICYLATE                            | 118-58-1   | -                                   |  |
| BUTYLPHENYLMETHYLPROPIONAL                   | 80-54-6    | -                                   |  |
| CINNAMAL                                     | 104-55-2   | -                                   |  |
| CINNAMYL ALCOHOL                             | 104-54-1   | -                                   |  |
| CITRAL                                       | 5392-40-5  | ≤ 0.05                              |  |
| CITRONELLOL                                  | 106-22-9   | ≤ 0.03                              |  |
| COUMARIN                                     | 91-64-5    | -                                   |  |
| EUGENOL                                      | 97-53-0    | -                                   |  |
| EVERNIA FURFURACEA EXTRACT                   | 90028-67-4 | -                                   |  |
| EVERNIA PRUNASTRI EXTRACT                    | 90028-68-5 | -                                   |  |
| FARNESOL                                     | 4602-84-0  | -                                   |  |
| GERANIOL                                     | 106-24-1   | ≤ 0.05                              |  |
| HEXYL CINNAMAL                               | 101-86-0   | -                                   |  |
| HYDROXYCITRONELLAL                           | 107-75-5   | -                                   |  |
| HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE | 31906-04-4 | -                                   |  |
| ISO EUGENOL                                  | 97-54-1    |                                     |  |
| LIMONENE                                     | 5989-27-5  | ≤ 84.0                              |  |
| LINALOOL                                     | 78-70-6    | ≤ 0.5                               |  |
| METHYL 2-OCTYNOATE                           | 111-12-6   | -                                   |  |

DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

# MYSTIC M@MENTS

| Product Name | Organic Green Mandarin Oil |  |
|--------------|----------------------------|--|
| Date         | 26 <sup>th</sup> June 2019 |  |





Document Date: 4th Oct 2019

# **STATEMENT**

We hereby confirm **Organic Green Mandarin Oil** is free of genetically modified materials and components. No ingredients, additives or processing aids of GM origin are used in the processing and purifying of the oil.

The Country of Origin for the Organic Green Mandarin oil is Argentina/Italy.

It is suitable for vegans and vegetarians



| Product Name | Organic Green Mandarin Oil        |  |  |  |  |
|--------------|-----------------------------------|--|--|--|--|
| INCI Name    | Citrus Nobilis Peel Oil Expressed |  |  |  |  |
| Product Code |                                   |  |  |  |  |
| Revision No  | 1 Date 26 June 2019               |  |  |  |  |

We certify that the above compound is in compliance with the Standards of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA 48<sup>th</sup> Amendment / published June 2015), provided it is used in the following class(es)) at a maximum concentration level of:

| Restricted Component | Cas No:   | % Level in | IFRA Standard               |
|----------------------|-----------|------------|-----------------------------|
|                      |           | Product    |                             |
| Limonene             | 5989-27-5 | ≤ 84.0     | Specification Std           |
| Linalool             | 78-70-6   | ≤ 0.5      | Specification Std           |
| Citronellol          | 106-22-9  | ≤ 0.03     | Restriction Stds (QRA Cat.) |
| Citral               | 5392-40-5 | ≤ 0.05     | Restriction Stds (QRA Cat.) |
| Geraniol             | 106-24-1  | ≤ 0.05     | Restriction Stds (QRA Cat.) |
| Methyl N-            | 85-91-6   | ≤ 0.4      | Restriction Stds (non QRA)* |
| methylanthranilate   | 02-31-0   | ≥ 0.4      |                             |

# **Additional Comments**

<sup>\*</sup>Methyl N-methylanthranilate is restricted due to phototoxic effects. The material has been identified for having the potential of forming nitroamines in nitrostating systems.

| IFRA class(es) [see annex for details] | Max level of use (%) |
|--|----------------------|
| Class 1                                | 25.0                 |
| Class 2                                | 25.0                 |
| Class 3.A                              | 25.0                 |
| Class 3.B                              | 25.0                 |
| Class 3.C                              | 25.0                 |
| Class 3.D                              | Not restricted.      |
| Class 4.A                              | 25.0                 |
| Class 4.B                              | 25.0                 |
| Class 4.C                              | 25.0                 |
| Class 4.D                              | 25.0                 |
| Class 5                                | 25.0                 |
| Class 6                                | Not restricted.      |
| Class 7.A                              | Not restricted.      |
| Class 7.B                              | 25.0                 |
| Class 8.A                              | 25.0                 |
| Class 8.B                              | Not restricted.      |
| Class 9.A                              | Not restricted.      |
| Class 9.B                              | Not restricted.      |

| Class 9.C  | 25.0            |
|------------|-----------------|
| Class 10.A | Not restricted. |
| Class 10.B | Not restricted. |
| Class 11   | Not restricted. |

For other kinds of application or use at higher concentration levels, a new evaluation may be needed.

The IFRA Standards regarding use restrictions are based on safety assessments by the Panel of Experts of the RESEARCH INSTITUTE FOR FRAGRANCE MATERIALS (RIFM) and are enforced by the IFRA Scientific Committee.

Evaluation of individual Fragrance ingredients is made according to the safety standards contained in the relevant section of the IFRA Code of Practice.

This certificate serves only as a guide to the maximum level of use. It is the ultimate responsibility of the customer to ensure safe formulating principles are utilised and the safety of the final product (containing this fragrance), by further testing if need be.

Note 1: It is recommended that any material used to impart perfume or flavour in products intended for human ingestion should consist of ingredients that are in compliance with appropriate regulations for foods and food flavourings in the countries of planned distribution.

Note 2: Trials must be performed to satisfy suitability for specified application.

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# **ANNEX: Definition of IFRA Classes**

| Finished product types  | IFRA class |
|---|------------|
| Lip Products of all types (solid and liquid lipsticks, balms,clear or coloured, etc.) Children's Toys.  | Class 1    |
| Deodorant and Antiperspirant Products of all types, including any product with intended or reasonably foreseeable use on the underarm or labelled as such (spray, stick, roll-on, under-arm, deo-cologne and body spray, etc.)  Fragranced bracelets.  Nose Pore Strips.  | Class 2    |
| Hydroalcoholic Products Applied To Recently Shaved Skin. (includes aftershave) (Edt range)  | Class 3.A  |
| Hydroalcoholic Products Applied To Recently Shaved Skin. (includes aftershave) (Fine fragrance range)   | Class 3.B  |
| Eye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc.) Men's Facial Creams, Balms. Baby Creams, Lotions, Oils. Body Paint for Children.   | Class 3.C  |
| Tampons   | Class 3.D  |
| Hydroalcoholic Products Applied To Unshaved Skin (includes aqueous based, alcoholic based and hydroalcoholic) like cologne, eau de cologne, eau de parfum or parfum. (EdT Range) Ingredients of perfume kits, scent strips for hydroalcoholic products. Scent pads, foil packs.   | Class 4.A  |
| Hydroalcoholic Products Applied To Unshaved Skin (includes aqueous based, alcoholic based and hydroalcoholic) like cologne, eau de cologne, eau de parfum or parfum (Fine fragrance Range)  | Class 4.B  |
| Hair Styling Aids, Hair Sprays of all types (pumps, aerosol sprays, etc.) Hair deodourant.  Body Creams, Oils, Lotions, Fragrancing Creams of all types (except baby creams, lotions and oils)  Fragrance Compounds for Cosmetic Kits, Foot care products, hair deodourant.  Body paint except those for children.  Body sprays (including body mist) with no intended or reasonably foreseeable use on the underarm. | Class 4.C  |
| Fragrancing creams, Solid perfumes.   | Class 4.D  |
| Women's Facial Creams/Facial Make-up. Hand cream. Hand sanitizers. Facial masks.* Baby Powder & Talc. Hair Permanent and Other Hair Chemical Treatments (e.g. relaxers) but not hair dyes. Wipes or Refreshing Tissues for Face, Neck, Hands, Body. Dry Shampoo or Waterless Shampoo.   | Class 5    |
| Mouthwash, including Breath sprays.  Toothpaste.  | Class 6    |

| Intimate 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)  | Class 8.A  |
| Hair Styling Aids Non-Spray of all types (mousse, gels, leave-in conditioners, etc.).                             |            |
| Nail care.  |            |
| Powders and talcs (not including baby powders and talcs)  |            |
| Hair Dyes   | Class 8.B  |
| Liquid soap, Bar Soap (Toilet Soap)   | Class 9.A  |
| All Depilatories (including waxes for mechanical hair removal).   |            |
| 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) and Shower Gels of all types.                                    |            |
| Bath Gels, Foams, Mousses, Salts, Oils and Other Products Added To Bathwater.                                     |            |
| -<br>Feminine Hygiene – Pads  | Class 9.B  |
| Feminine Hygiene – Liners   |            |
| Toilet Paper  |            |
| Wheat Bags.   |            |
| Facial tissues.   | Class 9.C  |
| Napkins.  |            |
| Paper towels.   |            |
| Other Aerosols (including air fresheners, sprays but not including deodorant/ antiperspirant, hair styling aids.) |            |
| Fragranced Face masks (not intended to be used as medical device)   |            |
| Handwash Laundry Detergents of all types including concentrates   | Class 10.A |
| Machine wash Laundry Detergents of all types including concentrates (liquid, powder, tablet etc.) including       |            |
| aundry bleaches and concentrates.   |            |
| Fabric softeners of all types including fabric softener sheets.   |            |
| Other Household Cleaning Products (fabric cleaners, soft surface cleaners, carpet cleaners)                       |            |
| Dry cleaning kits.<br>Hard Surface Cleaners of all types (bathroom and kitchen cleansers, furniture polish etc)   |            |
| Shampoos for pets.  |            |
| Hand dishwashing detergent including concentrates.  |            |
| Scented gloves, socks, tights with moisturisers.  |            |
| secticed gloves, socks, tights with moistansers.  |            |
| Vappies   | Class 10.B |
| Toilet seat wipes.  |            |
| All non-skin contact or incidental skin contact including:  | Class 11   |
| Candles.  |            |
| Air fresheners and fragrancing of all types (concentrated aerosol with metered doses (range 0.05-0.5 mL           |            |
| spray), plug ins, solid substrate, membrane delivery, electrical.)  |            |
| Air delivery systems.   |            |
| Cell phone cases.   |            |

Pot pourri, powders, fragrancing sachets, liquid refills for air fresheners (non cartridge systems), reed diffusers.

Liquid refills for air fresheners (cartridge systems).

Shoe polishes.

Deodorisers/ maskers not intended for skin contact (e.g. fabric drying machine deodorisers, carpet powders) Insecticides (mosquito coil, paper, electrical, for clothing etc.) excluding aerosols.

Scent delivery system using a dry air technology that releases a fragrance without sprays, aerosols or heated oils (technology of nebulisation).

Air freshening crystals.

Toilet blocks.

Joss sticks or incense sticks.

Machine dishwash detergent and deodorisers.

Machine only laundry detergent (e.g. liquitabs)\*\*

Plastic articles (excluding toys).

Fuels.

Fragranced lamp ring.

Scent pack.

Scratch and sniff (sampling technology).

Paints.

Cat litter.

Animal sprays (all types)

Treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorisers for textiles or fabrics).

Floor wax.

Odoured distilled water (that can be added to steam irons).

The table was prepared with the intention to cover the vast majority of the products; however it may not cover some specific applications. In this case other classes may be attributed based on a specific risk assessment.

19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK

<sup>\*</sup> Class 5, Facial masks: There are several types of masks: peel off (similar to rinse-off, rinse-off and leave-on (you only remove the excess with a facial tissue). To ease the split the most restrictive, i.e. leave-on is applied for all.

<sup>\*\*</sup> Liquitabs corresponds to a dose of liquids wrapped in a film: no contact with hands is expected under normal conditions of use



## 01. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

| 1.1 Product Identifier |            |  |  |  |  |  |
|------------------------|------------|--|--|--|--|--|
| Product Name           |            | Mandarin Oil Green Organic   |  |  |  |  |
| Biological Definition  |            | Citrus Nobilis Peel Oil Expressed is an essential oil expressed from the |  |  |  |  |
|                        |            | epicarps of the Mandarin, Citrus nobilis, Rutaceae.                      |  |  |  |  |
| INCI Name              |            | Citrus Nobilis Peel Oil Expressed  |  |  |  |  |
| Synonyms & Trade Nam   | nes        | -  |  |  |  |  |
| CAS-No                 | 84929-38-4 | EC No. 284-521-0 EINECS No. 284-521-0                                    |  |  |  |  |

# 1.2 Relative identified uses of the substance or mixture and uses advised against

Relevant uses: Fragrance and Flavouring agent

# 1.3 Details of the supplier of the safety data sheet

Madar Corporation Limited, 19 -20 Sandleheath Industrial Estate, Fordingbridge Hampshire, SP6 1PA

1.4 Emergency Tel. No.

+ 44 (0) 1425 655555

#### 02. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

The Full Text for all Hazard Statements displayed in Section 16.

# Classification (EC 1272/2008)

Flam. Liq. 3 - H226

Asp. Tox. 1 - H304

Skin Irrit 2 - H315

Skin Sens. 1 – H317

Aquatic Chronic 1 - H410

# 2.2 Label Elements

#### Label in accordance with (EC) No 1272/2008

GHS08

GHS07

GHS09

GHS02









| Signal Word | Danger.                        |
|-------------|--------------------------------|
| Contains    | Limonene, γ-Terpinene, Myrcene |

#### **Hazard Statements**

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.

H410 Very toxic to aquatic life with long lasting effects.

## **Precautionary Statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P241 Use explosion-proof electrical / ventilating / lighting equipment.

P262 Do not get in eyes, on skin or on clothing.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing and eye/face protection.

P301+310 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.

P331 Do NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents/container to ...

## **Supplementary Precautionary Statements**

None.

#### 2.3 Other Hazards

| PBT or vPvB according to Annex XIII | No additional data available.                                    |
|-------------------------------------|--|
| Adverse physio-chemical properties  | No additional data available.                                    |
| Adverse effects on human health     | Due to the presence of methyl N-methylanthranilate, the material |
|                                     | can have phototoxic effects (Skin).                              |

## 03. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

< 84.0% Limonene CAS-No.: 5989-27-5 EC No.: 227-813-5

Classification (EC 1272/2008) Flam. Liq. 3 – H226, Skin Irrit 2 – H315 Asp Tox. 1 – H304, Skin Sens. 1 – H317 Aquatic Acute 1 – H400, Aquatic Chronic 1 – H410

< 22.0% γ-Terpinene CAS-No 99-85-4, EC 202-794-6

Classification (EC 1272/2008); Flam. Liq. 3 – H226, Asp Tox. 1 –H304;

< 3.0% Myrcene (7-methyl-3-methyleneocta-1,6-diene) CAS-No.: 123-35-3 EC No.:204-622-5

Classification (EC 1272/2008) Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Asp. Tox. 1 - H304

#### **04. FIRST AID MEASURES**

| 4.1 Description of first aid measures                           |  |  |  |
|---|--|--|--|
| Inhalation  | Move to fresh air for at least 15 minutes, in case of complaints seek medical attention.                 |  |  |
| Ingestion   | Ask for <b>immediate</b> medical assistance. Rinse mouth with water and <b>do not provoke vomiting</b> . |  |  |
| Skin Contact  | Remove contaminated clothing and wash with water and soap the contaminated part. Make                    |  |  |
|   | sure you have eliminated the contamination. In case of complaints seek medical attention.                |  |  |
| Eye Contact   | Eye Contact Thorough eye-wash for 15 minutes with pure water, make sure you have eliminated the          |  |  |
| contamination, in case of complaints seek medical attention.    |  |  |  |
| 4.2 Most important symptoms and effects, both acute and delayed |  |  |  |

Symptoms: Inhalation: can cause slight headache

Contact: can cause bloodshot eyes - can cause slight skin rash.

Acute and delayed effects: no post-disorder effects are reported.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical assistance: see point 4.1. Immediate/special treatment: see point 4.1.

First aid specific means: eye wash fountain / safety shower should be available in the work area.

#### **05. FIRE-FIGHTING MEASURES**

#### 5.1 Extinguishing Media

Suitable extinguishing media: SMALL FIRE: use CO<sub>2</sub>, foam, dry powder

LARGE FIRE: use water spray or fog - cool containing vessels with water jet

in order to prevent pressure build-up, auto-ignition or explosion.

Unsuitable extinguishing media: pressurized water jet.

# 5.2 Special hazards arising from the product

Vapours may form explosive mixture with air - in case of fire, the following can be released: carbon monoxide (CO), carbon dioxide (CO₂), smoke, soot.

# 5.3 Advice for firefighters

Standard procedure for chemical fires; spray extinguishing media to base of flames. Use adequate protections for respiratory apparatus, avoid vapour inhalation.

#### **06. ACCIDENTAL RELEASE MEASURES**

## 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

In an emergency (i.e. unintentional important release of the product in enclosed space) respiratory protection (Gas filter A, Colour code brown: consider the maximum duration for wear) must be worn. Use insulating device for respiratory protection with an independent air supply in circumstances which are unclear - use adequate protections solvent resistant: security shoes, bodysuit, gloves and protective goggles (see point 8).

For emergency responders: as per non-emergency personnel.

Emergency procedures:

remove any ignition source and ensure adequate ventilation in working areas following accidental releases.

#### **6.2** Environmental Precautions

Keep away from drains - keep away from surface and ground water.

# 6.3 Methods and material for containment and cleaning up.

Keep away from heat and use non-combustible absorbing sawdust (sand, specific binder). Refer to point 13 for the appropriate methods of waste treatment.

#### 6.4 Reference to other sections

See point 4, 8 & 13.

#### 07. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Safe handling: during handling keep original container closed. Avoid contact with skin and eyes. Wear adequate protective gloves and eye/face protection. Avoid any sources of ignition. Avoid exposing to high temperature during processing. Maintain adequate local and general ventilation where product is handled.

Hygiene at work: do not ingest or apply to the skin as such. No smoking. Remove contaminated clothing. Good personal washing routines should be followed. If at risk of contamination, foods, beverages and other articles of consumption must not be stored or consumed at the work areas.

## 7.2 Conditions for safe storage, including any incompatibilities

Container: to be stored in stainless steel drums, preferably under inert atmosphere (nitrogen), protected from day-light **take note**: the container used during transportation must be considered only as a temporary container and it must not be considered in any case adequate for medium or long-term warehousing.

Conditions: stored in a dry, aerated place, away from any heat source and ignition source.

Temperature: from 5°C and 20°C.

# 7.3 Specific end use(s)

Use as odour agent / flavouring agent - the information of this section is not related to the use of the product in combination with any other material or any other process altering its characteristics.

#### **08. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1 Control parameters

No additional data available.

#### 8.2 Exposure controls

# **Protective Equipment**





| Process Conditions    | Provide eyewash station.  |
|-----------------------|---|
| Engineering Measures  | Where appropriate, use closed system to transfer and process this material – if appropriate, isolate mixing rooms and other areas.  Where this material is used or openly handled - maintain these areas under negative air pressure relative to the rest of the plant. |
| Respiratory Equipment | Not necessary in adequate local with general ventilation - avoid breathing vapours.   |
| Hand Protection       | Suitable gloves tested to EN374 (should be checked regularly) - always use with clean, dry hands.   |
| Eye Protection        | Protective goggles with built-in-frame tested to EN166 (should be checked regularly).   |
| Other Protection      | Protective work clothing solvent resistant (should be checked regularly).   |
| Hygiene Measures      | Good personal hygiene practices are always advisable, especially when working with chemicals / oils.  |
| Personal Protection   | Use personal protection according to Directive 89/686/EEC.  |
| Skin Protection       | Wear apron or protective clothing in case of splashes.  |

| Environmental Exposure | The usual precautions in handling chemicals have to be observed. |
|------------------------|--|
| Controls               |  |

## **09. PHYSICAL AND CHEMICAL PROPERTIES**

| Appearance               | Mobile liquid, colourless to slight amber.             |  |  |
|--------------------------|--|--|--|
| Colour                   | Colourless to slight amber.                            |  |  |
| Odour                    | Citrus – mandarin.                                     |  |  |
| Relative Density         | Approx. 0.844 @ 20°C                                   |  |  |
| Flash Point (°C)         | ~ 49.0   |  |  |
| Refractive Index         | Approx. 1.474 @ 20°C                                   |  |  |
| Melting Point (°C)       | No additional data available.                          |  |  |
| Boiling Point (°C)       | No additional data available.                          |  |  |
| Vapour Pressure          | No additional data available.                          |  |  |
| Solubility in Water @20° | Negligible in water. Soluble in alcohol and other oils |  |  |
| Auto-ignition            | No additional data available.                          |  |  |
| temperature (°C)         |  |  |  |

No additional data available.

# **10. STABILITY AND REACTIVITY**

# 10.1 Reactivity

Substance not reactive with water - substance not reactive if used according to storage & handling conditions & identified uses (see subsection 1.2).

# 10.2 Chemical stability

Substance stable if used according to storage & handling conditions & identified uses (see subsection 1.2).

#### 10.3 Possible hazardous reactions

None if used according to storage & handling conditions & identified uses (see subsection 1.2).

#### 10.4 Conditions to Avoid

Avoid exposure to heat.

# 10.5 Incompatible materials

Highly oxidizing agents.

# **10.6** Hazardous Decomposition Products

No known hazardous decomposition products under recommended storage & handling conditions - in case of combustion: carbon monoxide (CO), carbon dioxide ( $CO_2$ ).

# 11. TOXOLOGICAL INFORMATION

| 11.1 Information on toxicological effects  |   |  |
|--|---|--|
| Acute Toxicity LD50: 5 g/kg [source RIFM]. |   |  |
| Skin corrosion / irritation                | tation Hazard statement: H315 causes skin irritation. |  |

| Serious eye damage / irritation   | Not classified as irritating to the eye [source RIFM].               |  |
|-----------------------------------|--|--|
| Respiratory or skin sensitisation | Hazard statement: H317 may cause an allergic skin reaction.          |  |
| Germ Cell Mutagenicity            | No additional data available.  |  |
| Carcinogenicity                   | No additional data available.  |  |
| Reproductive toxicity             | No additional data available.  |  |
| STOT-single exposure              | No additional data available.  |  |
| STOT-repeated exposure            | No additional data available.  |  |
| Aspiration hazard                 | Hazard statement: H304 may be fatal if swallowed and enters airways. |  |
| Photo-toxicity                    | No additional data available.  |  |
| Other Information                 | No additional data available.  |  |

## **12. ECOLOGICAL INFORMATION**

# 12.1 Toxicity

Aquatic life: hazard statement: H410 very toxic to aquatic life with long lasting effects.

Algae/aquatic plants: EC50 65.9 mg/l (48h) calculated value [source RIFM].

Fish/aquatic invertebrates: No additional data.

## 12.2 Persistence & degradability

This substance to be considered as a readily biodegradable substance; based on its ready biodegradability, oil does not fulfil the criteria for persistence.

#### 12.3 Bioaccumulation Potential

This substance is considered as a readily biodegradable, therefore bioaccumulation is not expected.

#### 12.4 Mobility in soil

This substance is considered as a readily biodegradable NCS. Based on the ready biodegradability of the NCS, simulation tests in surface water, sediment and soil are not required in accordance with column 2 of REACH Annex IX.

#### 12.5 Results of PBT and vPvB Assessment

This substance is not classified as: PBT or vPvb / CMR.

# 12.6 Other adverse effects

No additional data available.

#### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

The containers used for this product must completely empty before disposal. Dispose product and/or contaminated packaging in accordance with federal, state and local environmental control regulations - disposal through the waste water is illegal.

#### 14. TRANSPORT INFORMATION

| 14.1 | UN number   |      |
|------|-------------|------|
|      | UN No. Road | 1169 |
|      | UN No. SEA  | 1169 |
|      | UN No. AIR  | 1169 |

# 14.2 UN proper shipping name

Extracts, aromatic, liquid.

# 14.3 Transport hazard class(es)

ADR/RID/ADN Class 3
IMDG Class 3
ICAO Class/Division 3

**Transport Labels** 



## 14.4 Packing group

ADR/RID/ADN Packing group III
IMDG Packing group III
ICAO Packing group III

## 14.5 Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant.



#### 14.6 Special precautions for user

This product contains constituents flammables & dangerous for the environment - in case of pouring out, make sure to label new package accordingly, reproducing original label with relevant symbols.

# 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

No additional data available.

#### 15. REGULATORY INFORMATION

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**Statutory Instruments** 

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

**Guidance Notes** 

Workplace Exposure Limits EH40. CHIP for everyone HSG (108).

**EU** Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a

European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

# 15.2 Chemical safety assessment

No additional information available.

## **16. OTHER INFORMATION**

| Hazard and/or Precautionary | H226 flammable liquid and vapour.                         |  |  |
|-----------------------------|---|--|--|
| Statements in Full          | H304 may be fatal if swallowed and enters airways.        |  |  |
|                             | H315 causes skin irritation.                              |  |  |
|                             | H317 may cause an allergic skin reaction.                 |  |  |
|                             | H410 verytoxic to aquatic life with long lasting effects. |  |  |
| Other Information           | None.   |  |  |
| Revision Date               | 17/05/2019  |  |  |
| Reason for revision         | New SDS.  |  |  |
| Rev No/Repl, SDS Generated  | 01  |  |  |

DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



| Produ | ct Name    | Mandarin Oil Green Organic |     |    |
|-------|------------|----------------------------|-----|----|
| Date  | 17/05/2019 | Product Code               | Rev | 01 |

| Description | Citrus Nobilis Peel Oil Ex  | Citrus Nobilis Peel Oil Expressed is an essential oil expressed from the epicarps of |           |  |  |
|-------------|-----------------------------|--|-----------|--|--|
|             | the Mandarin, Citrus not    | the Mandarin, Citrus nobilis, Rutaceae.  |           |  |  |
| Appearance  | Clear liquid, colourless to | Clear liquid, colourless to slight amber.  |           |  |  |
| Odour       | Characteristic              | Characteristic   |           |  |  |
| INCI Name   | Citrus Nobilis Peel Oil Ex  | Citrus Nobilis Peel Oil Expressed  |           |  |  |
| CAS Number  | 84929-38-4                  | EC Number  | 284-521-0 |  |  |

#### **TEST SPECIFICATION**

| ANALYTICAL TEST                | SPECIFICATION RANGE                   |
|--------------------------------|---------------------------------------|
| Specific Gravity @ 20°C (g/ml) | 0.839 - 0.849                         |
| Refractive Index @ 20°C        | 1.468 – 1.478                         |
| Optical Rotation (Degrees)     | +68.0 to +83.0                        |
| Peroxide value (mmol/l)        | ≤ 20 (at time of production analysis) |
|                                |                                       |

#### **STORAGE**

Store product in full, tightly closed containers in a cool dry place away from heat and sunlight.

#### **STABILITY**

Stable under recommended storage conditions

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Please note as this is a wholly natural material some parameters, in particular, appearance, colour and odour, may change due to natural variation and climate change. This in no way affects the quality and efficacy of the product.