

# CERTIFICATE OF ANALYSIS ORGANIC BERGAMOT OIL FCF

Batch No:	4388906
Best Before :	February 2023

**Appearance:** A pale yellow liquid. **Odour:** Fresh, citrus fruit.

TEST	SPECIFICATION	ANALYSIS
Specific Gravity @ 20°C	0.863 - 0.873	0.866
Refractive Index @ 20°C	1.458 -1.468	1.463
Optical Rotation @ 20°C	+20.00 to +40.00	+31.50
Peroxides (mmol/l)	< 20.0	10.0



## **ALLERGENS DECLARATION**

Product Name		Organic Bergamot Oil FCF (Bergaptene Free)			
INCI Name		Citrus Bergamia Oil			
Date	01/08/2019	Product Code		Revision	2

Material	Cas Number	Cosmetic Allergens 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	≤ 1.0	
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	-	
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	≤ 47.0	
LINALOOL	78-70-6	≤ 15.0	
METHYL 2-OCTYNOATE	111-12-6	-	

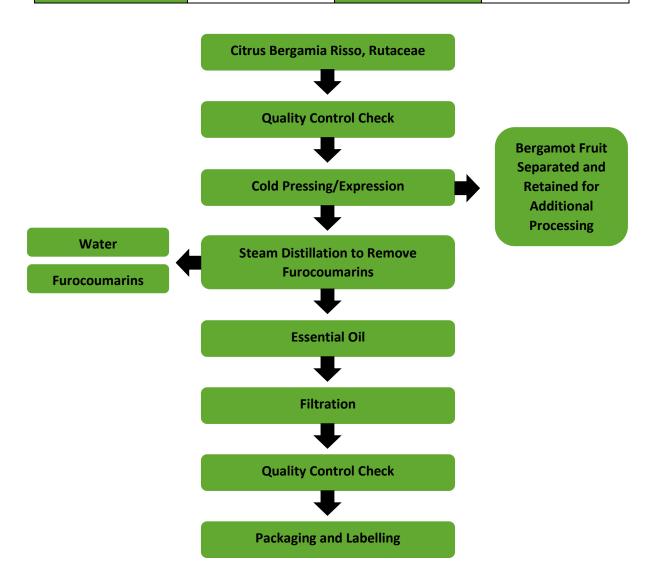
Date 1<sup>st</sup> Aug 2019

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.



# **Manufacturing Flow Chart**

Product Name	Organic Bergamot FCF		
Date	08/01/2020	Product Code	





## **GMO Statement**

PRODUCT NAME: Bergamot Organic

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

06/03/2019



Product Name	Organic Bergamot FCF			
INCI Name	Citrus Bergamia Peel Oil Expressed			
Product Code				
Revision No	3	Date	08/01/2020	

Restricted Component	stricted Component CAS		IFRA Standard
Limonene	5989-27-5	≤47.0	Specification Standard
Linalool	78-70-6	≤15.0	Specification Standard
Citronellol	106-22-9	≤0.03	Restriction Standards (QRA cat.)
Citral	5392-40-5	≤1.00	Restriction Standards (QRA cat.)
Bergaptene	484-20-8	≤0.001	Restriction Standards (QRA cat.)
Furocoumarins	-	≤0.0035 Restriction Standard	

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 25); provided it is used in the following class(es) at a maximum concentration level of the above.

According to Cosmetic Regulation (EC) No 1223/2009 Annex II furocoumarins (e.g. trioxysalen (INN), 8-methoxypsoralen, 5-methoxypsoralen) are prohibited for use in cosmetic products except for normal content in natural essences used. In sun protection and in bronzing products, furocoumarins shall be below 1mg/kg (1ppm).

IFRA class(es) [see annex for details]	Max level of use (%)
Class 1	4.0
Class 2	5.0
Class 3A	20.0
Class 3B	20.0
Class 3C	20.0
Class 3D	20.0
Class 4A	60.0
Class 4B	60.0
Class 4C	60.0
Class 4D	60.0
Class 5	30.0
Class 6	Not Restricted.
Class 7A	10.0
Class 7B	10.0
Class 8A	Not Restricted.



Class 8B	Not Restricted.
Class 9A	Not Restricted.
Class 9B	Not Restricted.
Class 9C	Not Restricted.
Class 10A	Not Restricted.
Class 10B	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 3A
Hydroalcoholic Products Applied To Recently Shaved Skin. (includes aftershave) (Fine fragrance range)	Class 3B
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 3C
Tampons	Class 3D
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 4A
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 4B
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 4C
Fragrancing creams, Solid perfumes.	Class 4D
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 7A
Insect Repellent (intended to be applied to the skin).	Class 7B
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. Powders and talcs (not including baby powders and talcs)	Class 8A
Hair Dyes	Class 8B
Liquid soap, Bar Soap (Toilet Soap) 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.	Class 9A
Feminine Hygiene – Pads Feminine Hygiene – Liners Toilet Paper Wheat Bags.	Class 9B
Facial tissues. 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)	Class 9C
Handwash Laundry Detergents of all types including concentrates  Machine wash Laundry Detergents of all types including concentrates (liquid, powder, tablet etc.) including laundry 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.  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.	Class 10A
Nappies Toilet cost wines	Class 10B
Toilet seat wipes.  All non-skin contact or incidental skin contact including:  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.	Class 11



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

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)

Fragranced lamp ring.

Scent pack.

Scratch and sniff (sampling technology).

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.

<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	Product Name Bergamot Oil FCF Organic.				
Biological Definition		Citrus Bergamia Peel Oil Expressed is an essential oil expressed from the epicarps of the Bergamot, Citrus bergamia risso, Rutaceae.			•
INCI Name		Citrus Bergamia Peel Oil Expressed			
Synonyms & Trade Names -					
CAS-No	8007-75-8	EC No.	616-915-9	EINECS No.	616-915-9

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

Relevant Uses: Flavours, Fragrances and flavouring agent in alcohol. Use in accordance with good manufacturing and industrial hygiene practices.

## 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 during office hours

## **02. HAZARD IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

The full text for all hazard statements are displayed in Section 16.

#### Classification (EC 1272/2008)

Physical hazards:

- Flam. Liq. 3 - H226

Health hazards:

- Asp. Tox. 1- H304
- Skin Irrit. 2 H315
- Skin Sens. 1B H317
- Eye Irrit. 2 H319

#### Environmental hazards:

- Aquatic Acute 1- H400
- Aguatic Chronic 1- H410

#### 2.2 Label Elements

Label in accordance with (EC) No 1272/2008

GHS02 GHS08 GHS07 GHS09











Signal Word Danger.

Contains d-Limonene, beta-Pinene, Y-terpinene

#### **Hazard Statements**

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire: Use Carbon dioxide, Dry powder or Foam to extinguish.

P501 Dispose of contents/container according to the local regulations.

## **Supplementary Precautionary Statements**

P264 Wash hands and exposed skin thoroughly after handling.

## 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	No additional data available.

## **03. COMPOSITION/INFORMATION ON INGREDIENTS**

## 3.2 Mixtures

## ≤47.0% d-Limonene

CAS: 5989-27-5 EC: 227-813-5 Classification (EC 1272/2008)

- Flam. Liq. 3 H226
- Asp Tox. 1 H304
- Skin Irrit 2 H315
- Skin Sens. 1 H317
- Aguatic Acute 1 H400
- Aquatic Chronic 1 H410

≤30.0% Linalyl Acetate

CAS: 115-95-7 EC: 204-116-4



Classification (EC 1272/2008)

Skin Irrit. 2 - H315

Eye Irrit. 2 - H319

≤15.0% Linalool

CAS: 78-70-6 EC: 201-134-4 Classification (EC 1272/2008)

Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Eye Irrit. 2 - H319

≤7.0% beta-Pinene

CAS: 127-91-3 EC: 204-872-5 Classification (EC 1272/2008)

Flam. Liq. 3 - H226

Asp. Tox. 1 - H304

Skin Irrit. 2 - H315

Skin Sens. 1 - H317

Aquatic Acute 1 – H400

Aquatic Chronic 1 – H410

≤7.0% Y-terpinene

CAS: 99-85-4 EC: 202-794-6 Classification (EC 1272/2008)

Flam. Liq. 3 – H226

Asp Tox. 1 – H304

## ≤1.0% Myrcene (7-methyl-3-methyleneocta-1,6-diene)

CAS: 123-35-3 EC:204-622-5 Classification (EC 1272/2008)

Flam. Liq. 3 - H226

Asp. Tox. 1 - H304

Skin Irrit. 2 - H315

Eye Irrit. 2 - H319

Aquatic Acute 1 – H400

Aquatic Chronic 1 – H410

## ≤1.0% Sabinene

CAS: 3387-41-5 EC: 222-212-4 Classification (EC 1272/2008)

Flam. Liq. 3 - H226

Asp. Tox. 1 - H304

#### ≤1.0% Alpha-pinene

CAS: 80-56-8 EC: 201-291-9 Classification (EC 1272/2008)

Flam. Liq. 3 - H226

Acute Tox. 4 H302

Asp. Tox. 1 - H304

Skin Irrit. 2 - H315

Skin Sens. 1 - H317

Aquatic Acute 1 – H400



- Aquatic Chronic 1 – H410

#### ≤1.0% Citral

CAS: 5392-40-5 EC: 226-394-6 Classification (EC 1272/2008)

Skin Irrit. 2- H315

- Skin Sens. 1- H317

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

4.1 Description of first aid measures		
Inhalation	Remove victim immediately from source of exposure. Get medical attention if any discomfort continues.	
Ingestion	Rinse mouth and drink abundant water to dilute substance. Avoid vomiting, risk of aspiration!	
Skin Contact	Remove contaminated clothes. Wash affected areas with copious amounts of water.	
Eye Contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.	

#### 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

Treat symptomatically

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

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

## 5.1 Extinguishing Media

Carbon dioxide, Dry powder or Foam. Cool containers with water.

## 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, Carbon dioxide, smoke, soot.

## 5.3 Advice for firefighters

Use chemical protection clothing and self-contained breathing apparatus.

## **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 sewerage, surface water and groundwater. Do not allow to enter sewerage system.

## 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 protection 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) with minimum head space, 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

Not determined.

#### 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	Measures should be taken to prevent materials from being splashed into the eyes or on the skin. Wear eye shields and protective clothing.	
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.	
Personal Protection	Protective work clothing solvent resistant (should be checked regularly).	
Skin Protection	Avoid contact with skin. Wear suitable gloves.	
Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorised companies.	

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

ColourYellow.OdourCitrus, bergamot.Relative DensityApprox. 0.86 @ 20°CFlash Point (°C)Approx. 57°CRefractive IndexApprox. 1.463 @ 20°CMelting Point (°C)No additional data available.Boiling Point (°C)No additional data available.Vapour PressureNo additional data available.Solubility in Water @20°CInsoluble in water.Auto-ignitionNo additional data available.temperature (°C)No additional data available.	Appearance	Clear liquid.
Relative Density Approx. 0.86 @ 20°C  Flash Point (°C) Approx. 57°C  Refractive Index Approx. 1.463 @ 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°C Insoluble in water.  Auto-ignition No additional data available.	Colour	Yellow.
Flash Point (°C)  Refractive Index  Approx. 1.463 @ 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°C  Insoluble in water.  Auto-ignition  No additional data available.	Odour	Citrus, bergamot.
Refractive Index Approx. 1.463 @ 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°C Insoluble in water.  Auto-ignition No additional data available.	Relative Density	Approx. 0.86 @ 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°C  Insoluble in water.  Auto-ignition  No additional data available.	Flash Point (°C)	Approx. 57°C
Boiling Point (°C)  No additional data available.  Vapour Pressure  No additional data available.  Solubility in Water @20°C  Insoluble in water.  Auto-ignition  No additional data available.	Refractive Index	Approx. 1.463 @ 20°C
Vapour PressureNo additional data available.Solubility in Water @20°CInsoluble in water.Auto-ignitionNo additional data available.	Melting Point (°C)	No additional data available.
Solubility in Water @20°C Insoluble in water.  Auto-ignition No additional data available.	Boiling Point (°C)	No additional data available.
Auto-ignition No additional data available.	Vapour Pressure	No additional data available.
	Solubility in Water @20°C	Insoluble in water.
temperature (°C)	Auto-ignition	No additional data available.
	temperature (°C)	

## **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

Strong oxidizers.

## 10.6 Hazardous Decomposition Products

No known hazardous decomposition products under recommended storage & handling conditions - in case of combustion: carbon monoxide (CO), carbon dioxide (CO2).

### **11. TOXOLOGICAL INFORMATION**

11.1 Information on toxicological effects	
Acute Toxicity	LD50 11.52 g/kg.
Skin corrosion / irritation	Causes skin irritation.
Serious eye damage / irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	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	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: Very toxic to aquatic life with long lasting effects.

Algae/aquatic plants: EC50 6.2 mg/l (48h) calculated value [source RIFM].

Fish/aquatic invertebrates: No additional data available.

PNECs: No additional data available.

## 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

Very toxic to aquatic life with long lasting effects.

### 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 ADR/RID/ADN – Class 3 IMDG – Class 3 ICAO – Class 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

None.

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

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## 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 (EC) 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 in Full	H226 Flammable liquid and vapour.
	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.
	H400 Very toxic to aquatic life.
	H410 very toxic to aquatic life with long lasting effects.
Revision Date	03/01/2020
Rev No/Repl, SDS Generated	5

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.



## PRODUCT SPECIFICATION

Date         08/01/2020         Product Code         Rev         6	

Description	Citrus Bergamia Peel Oil Expressed is an essential oil expressed from the epicarps of	
	the Bergamot, citrus bergamia risso, Rutaceae	
Appearance	Liquid, Yellow	
Odour	Characteristic	
Origin	Italy	
INCI Name	Citrus Bergamia Peel Oil	
CAS Number	89957-91-5 EC Number 289-612-9	

#### **TEST SPECIFICATION**

Analytical Test	Specification Range
Specific Gravity @ 20°C (g/ml)	0.863 - 0.873
Refractive Index @ 20°C	1.458 - 1.468
Optical Rotation (°)	+20.0 to + 40.0
Peroxides (mmol/l)	≤ 20.0

## **STORAGE**

Store in a cool, dry, well-ventilated place. Keep away from heat and sunlight.

#### **STABILITY**

If stored for twenty-four months, check quality of product before use.

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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.



## **Vegetarian & Vegan Suitability Statement**

PRODUCT NAME: Bergamot 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.

28/06/19