

CERTIFICATE OF ANALYSIS

PRODUCT BLOOD ORANGE

BATCH NUMBER 4427705

BEST BEFORE DATE MARCH 2024

TEST	UNIT	RESULTS
APPEARENCE COLOR ODOR DENSITY 20 REFRACTIVE		CLEAR MOBILE LIQUID ORANGE TO RED CITRIC, FRESH, SWEET, JUICY
IND.20 OPTICAL ROTATION GC ANALYSIS	(g/ml)	0.847 1.47 4 0
	(°)	97.30 PROFILE SIMILAR TO STANDARD

DATE OF MANUFACTURE: MARCH 2020

REACH REGISTRATION NO.01-2119493353-35

WE CERTIFY THAT THE QUALITY OF THIS PRODUCT CONFORMS WITH OUR SPECIFICATIONS.

THIS CERTIFICATE DOES NOT RELEASE THE CUSTOMER FROM THE OBLIGATION TO CARRY OUT EXAMINATION OF TH GOODS RECEIVED.

WE SHALL NOT BE HELD LIABLE FOR ANY DAMAGE OR INJURY RESULTING FROM HNADLING OR WITH THE ABOVE PRODUCT.

THIS IS A COMPUTER PRINTED DOCUMENT AND IT IS THEREFORE NOT SIGNED.



FRAGRANCE ALLERGENS

Product name: BLOOD ORANGE

logredien)	Total content (w/w)
Amyl cinnamic alcohol (CAS 101-85-9)	Not Detected
Amyl cinnamic aldehyde (CAS 122-40-7)	Not Detected
Anisyl alcohol (CAS 105-13-5)	Not Detected
Benzyl alcohol (CAS 100-51-6)	Not Detected
Benzyl benzoate (CAS 120-51-4)	Not Defected
Benzyl cinnamate (CAS 103-41-3)	Not Detected
Benzyl salicylate (CAS 118-58-1)	Not Detected
Cinnamic alcohol (CAS 104-54-1)	Not Detected
Cinnamic aldehyde (CAS 104-55-2)	Not Detected
Citral (CAS 5392-40-5)	< 0,2%
Citronellol (CAS 106-22-9)	Not Detected
Coumarin (CAS 91-64-5)	Not Detected
Eugenal (CAS 97-53-0)	Not #etected
Farnesol (CAS 4602-84-0)	Not Detected
Geraniol (CAS 106-24-1)	Not Detected
Hexylcinnamic aldehyde (CAS 101-86-0)	Not Detected
Hydroxycitronellal (CAS 107-75-5)	Not Detected
Hydroxymethylpentylcyclohexene carboxalehyde (Lyral) (CAS 31906-04-4)	Not Detected
Isoeugenol (CAS 97-54-1)	Not Detected
D-Limonene (CAS 5989-27-5)	< 96,5%
Linaloo! (CAS 78-70-6)	< 0,3%
2-methyl-3-(4-(1,1-dimethyl ethyl) phenyl)propanal (Lilial) (CAS 80-54-6)	Not #etected
Methyl heptine carbonate (CAS 111-12-6)	Not Detected
Gamma-methylionone (iso-alfa-Methylionone) (3-methyl-4-(2,6,6 trimethyl-2-cyclohexen-1-yl)-3-buten-2-one) (CAS 127-51-5)	Not Detected
Treemoss (Evernia furfuracea) (CAS 90028-67-4) Oakmoss	Not Detected
(Evernia prunastri)(CAS 90028-68-5)	Not Detected

Detection limit: 10 ppm

This list comprises references 45, 67 and 69 to 92 in Annex III $\dot{\phi}$ to Regulation (EC)1223/2009 (the cosmetic regulation)

Version date: 17 October 2011

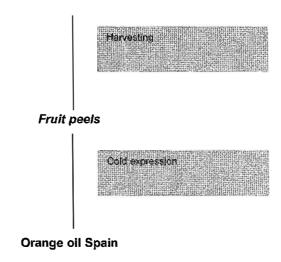


3 February 2021

Flowchart of the Production Process

Product: ORANGE OIL SPAIN

Citrus sinensis L. Osbeck



Information provided by our supplier(s) and/or according to literature data.



GMO CERTIFICATE

Product: BLOOD ORANGE

This is to certify that to the best of our knowledge the above-mentioned product

- · does not contain
- does not consist of
- · is not derived from
- is not produced with the help of

genetically modified organisms (GMO) or derivative ingredients as per EU Directive 2001/18/EC.

Foods containing this product are not subject to the labelling requirements of EU Regulations 1829/2003/EC and 1830/2003/EC.

This material complies with article 9 of Regulation (EC) 834/2007 regarding the prohibition on the use of GM®s in organic production.

This document is electronically generated and therefore it is not signed



IFRA CONFORMITY CERTIFICATE

Product: BLOOD ORANGE

We certify that the above-mentioned product is in compliance with the Standards of the International Fragrance Association (IFRA) up to and including the 49th Amendment to the IFRA Standards (published January 2020), provided it is used in the following categories at a maximum concentration level of ⁽¹⁾:

Category 1	55% (2)	Category 7A	77% (2)
Category 2	16%	Category 7B	77%
Category 3	26%	Category 8	17%
Category 4	Not restricted	Category 9	Not restricted
Category 5A	75%	Category 10A	Not restricted
Category 5B	51%	Category 10B	Not restricted
Category 5C	75%	Category 11A	17%
Category 5D	17%	Category 11B	17%
Category 6	Not restricted	Category 12	Not restricted

⁽¹⁾ the concentration of a fragrance ingredient should not exceed the usual concentration of the fragrance compound in the finished product.

Please note this certificate does not include food status conformity check. A separate document, with may be available depending on the product, is needed for such purpose.

Contains the following substances restricted by IFRA standards:

CITRAL	< 0,2%
P-MENTHA-1,8-DIEN-7-AL (PERILLA ALDEHYDE)	< 0,08%
CARVONE	< 0,05%
CITRONELLAL	< 0.1%

and complies with the latest IFRA specification.

This cartificate provides restrictions for use of the specified product based only on those materials rectricted by IFRA Standards for the toxicity endpoint(s) described in each standard, it does not provide certification of a comprehensive safety assesment of all product constituents.

FRA would recommend 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 and, where these are lacking, with the recommendations laid down in the Code of Practice of IOFI (International Organisation of the Flavour Industry).



BLOOD ORANGE

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SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1. Identification of the substance/mixture

BLOOD ORANGE Trade name: Substance name: ORANGE OIL **CAS Number:** 8028-48-6 232-433-8 CE Number: **REACH Registration number:** 01-2119493353-35

Telephone:

1.2. Relevant identified uses of the substance or mixture and uses advised against

Raw material for the manufacture of fragrances and/or flavourings.

1.3. Details of the supplier of the safety data sheet

Company MADAR Corporation Limited

Address: 19 - 20 Sandleheath Industrual Estate

Fordingbridge SP6 1PA

01425 655555 E-mail: technical@madarcorporation.co.uk

1.4. Emergency telephone number

01425 655555

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Flammable Liquids - Category 3 - H226 Skin Irritant - Category 2 - H315 Skin sensitizer - Category 1- H317 Aspiration hazard - Category 1 - H304

Hazardous to the aquatic environment, long-term (chronic) - Category 2 - H411

2.2. Label Elements



Signal Word:

Danger

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.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements:

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

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P301+P310+P331 ~ IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

P302+P352+P333+P313 - IF ON SKIN: Wash with plenty of soap and water. If skin irratation or rash occurs: Get medical advice attention.

Suplemental Hazard Information:

Contains LIMONENE, ALPHA-PINENE, May produce an allergic reaction

2.3. Other hazards

No Information available



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical name: **ORANGE OIL** CAS number: 8028-48-6 EC number: 232-433-8

Hazardous constituents:

Chemical Name	% (w/w)	CAS No EC No	Classification according to Regulation 1272/2008
LIMONENE	≥50	138-86-3 205-341-0	Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skìn Sens. 1B - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410
MYRCENE	≥1;<10	123-35-3 204-622-5	Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411
ALPHA-PINENE	≥0.1; <1	80-56-8 201-291-9	Flam. Liq. 3 - H226 Acute Tox. 4 (oral) - H302 Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

See the full text of the hazard statements in section 16.

3.2. Mixtures

Not applicable.

SECTION 4. FIRST-AID MEASURES

4.1. Description of necessary first aid measures

Rinse mouth with water. Ingestion:

Obtain medical advice.

Keep at rest. Do not induce vomiting.

In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes and Eve contact:

Inhalation: Remove person to fresh air and keep at rest.

Seek immediate medical advice.

Skin contact: Take off immediately all contaminated clothing.

Thoroughly wash affected skin with soap and water, Seek medical attention if symptoms persist.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

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

5.1. Extinguishing Media

Water spray, carbon dioxide, dry chemical powder or appropriate foam For safety reasons do not use full water jet.

SECTION 6. FIRE-FIGHTING MEASURES

5.2. Special hazards arising from the substance or mixture

Known or Anticipated Hazardous Products of Combustion: Emits toxic fumes under fire conditions.



SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH)

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5.3. Advice for firefighters

High temperatures can lead to high pressures inside closed containers. Avoid inhalation of vapors that are created. Use appropriate respiratory protection. Do not allow spillage of fire to be poured into drains or watercourses. Wear self-contained breathing apparatus and protective clothing.

Secrence acodental research measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate surronding areas. Ensure adequate ventilation, Keep unnecessary and unprotected personnel from entering, Do not breathe vapor/spray. Avoid contact with skin and eyes, information regarding personal protective measures: see section 8.

6.2. Environmental precautions

To avoid possible contamination of the environment, do not discharge into any drains, surface waters or groundwaters.

6.3. Methods and materials for containment and cleaning up

Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-lime, sand, soda ash). Place in covered containers using non-sparking tools and transport outdoors, Avoid open flames or sources of ignition (e.g. pilot lights on gas hot water heater). Ventilate area and wash spill site after material pickup is complete.

6.4. Reference to other sections

Information regarding exposure controls, personal protection and disposal considerations can be found in sections & and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not store or handle this material near food or drinking water. Do not smoke. Avoid contact with the eyes, skin and clothing. Wear protective clothing and use glasses. Observe the rules of safety and hygiene at work. Keep in the original container or an alternative made from a compatible material.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed and preferably full containers in a cool, dry and ventilated area, protected from light. Keep away from sources of ignition (e.g. hot surfaces, sparks, flame and static discharges). Keep away from incompatible materials (see section 10).

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Control parameters

Components with occupational exposure limits: None known.

8.2. Exposure controls

Measures should be taken to prevent materials from being splashed onto the body. Appropriate engineering controls:

Provide adequate ventilation, according to the conditions of use. Use a mechanical exhaust if required,

Eve/Face protection: Chemical safety goggles are recommended, Wash contaminated googles before reuse, Chemical-resistant gloves are recommended, wash contaminated gloves before reuse, Hand Protection:

Body protection: Personal protective equipment for the body should be selected based on the task being proformed and the risks

involved.

Respiratory Protection: In case of insufficient ventilation, use suitable respiratory equipment.

Emissions from ventilation or process equipment should be checked to ensure they comply with environmental Environmental exposure controls:

protection legislation.

In some cases, fifters or enginerring modifications to the process equiptment will be necessary to reduce emissions to

acceptable levels.

SECTION STRUCKLEAND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical propeties

Appearance: Liquid

Colour: Conforms to standard Odour: Conforms to standard Odour the shold: M addetermined pH: Not determined



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Melting point/iregalng point: Not determined Boling point/boiling range (° C l: 176-180 ilash point: 47°C E vaporation rate: Not determined Flammability: Not determined Lowerilammability/Explosive 11mit: Not determined Upper ilammability/0<plosive ilmit: Not determined Vapocr pressure: Not determined Vaporir Density: Not determined Density: 0,842-0,85 g/mL (20°C) Relative density: 0,842-0,85 (20°C) livater solubility: INSCLUBLE IN WATER S olubinity in other solvents: SOLUBLE IN ETHANOL Pariltilon coefficient n-octanol/water: Not determined Auto-ignition temperature: Not determined Decomposition temperature: Not determined Viscosity: dynamic: Not eletermined Viscosity: kinematic: Not determined E)(plosive properties Not determined

Not determined

9.2. Additional information

No information available.

Oxidising properties:

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

10.4. Conditions to Avoid

Conditions to Avoid: Excessive heat, flame er other ignition sources.

10.5. Incompatible materials

Avoid contact with strong acids and bases and oxidizing agents.

10.6. Hazardous decomposition products

During combustion may form carbon monoxide and unidentified organic compounds.

SECTION 11- TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity	Based
Skin corresion/irritation	Cause
Serious eye damage/irritation	Based
Respiratory or skin sensitisation	May o
Germ cell mutagenicity	Based
Carcinogenicity	Based
Reproductive toxicity	Based
STOT-single exposure	Based
STOT-repeated exposure	Based
Aspiration hazard	May l

d on the data available, the criteria for classification are not met. es skin irritation.

d on the data available, the criteria for classification are not met. cause an allergic skin reaction

d on the data available, the criteria for classification are not met. d on the data available, the criteria for classification are not met. d on the data available, the criteria for classification are not met. d on the data available, the criteria for classification are not met. d on the data available, the criteria for classification are not met, be fatal if swallowed and enters airways

12.1. Toxicity

Assessment

Toxic to aquatic life with long lasting effects.

Experimental/calculated data:



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No information available.

12.2. Degradability

No information available,

12.3. Bioaccumulative potential

No information available.

12.4. Soil mobility

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

See also sections 6, 7, 13 and 15

Do not allow to get into waste water or waterways.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of in accordance with national and local environmental regulations.

	ADR/RID/ADN	IMDG	IATA-ICAO
14.1. UN Number	UN1169	UN1169	UN1169
14.2. UN Proper Shipping Name	EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID (LIMONENE)	EXTRACTS, AROMATIC, LIQUID
14.3. Transport Hazard Class(es)	3	3	3
14.4. Packing Group	111	141	181
14.5. Environmental hazards	Yes	Yes	Yes
Additional information			

14.6 Special precautions for user

None known

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

SECTION 15: REGULATORY INFORMATION

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

No information available

15.2 Chemical Safety assessment

No information available

SECTION TO: OTHER INFORMATION

Full text of the R-phrases, hazard statements and precautionary statements mentioned in section

3H226 - 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.

H411 - Toxic to aquatic life with long lasting effects.

The information included in this safety data sheet is based on the available data at the moment the document is issued, it is meant to be a description of safety requirements for our product and does not stand for a guarantee of its properties. The user is responsible for taking all necessary steps leading to complianc, with local rules and legislation,



SPECIFICATION SHEET

VERSION 5,00 **VERSION DATE** 15/01/14 **PRINT DATE** 12/05/21

PRODUCT BLOOD ORANGE

APPLICATIONS Raw material for industrial use intended for the manufacture of flavours and/or fragrances.

IUPAC NAME ORANGE OIL SWEET
PLANT OF ORIGIN Citrus sinensis (L.) Osbeck

PART OF THE PLANT FRUIT PEELS

SYNONYMS

CAS 8028-48-6
CAS 2 8008-57-9
EINECS 232-433-8

FEMA 2825

TARIFF NUMBER 330112100€

FOOD GRADE CERTIFICATE AVAILABLE ON REQUEST REACH REGISTRATION NO. 01-2119493353-35

SPECIFICATIONS

ASPECT AT 20° C CLEAR MOBILE LIQUID COLOUR ORANGE TO RED

ODOUR CITRIC, FRESH, SWEET, JUICY

 TASTE
 CHARACTERISTIC

 DENSITY A 20° C (g / ml)
 0,842 - 0,850

DENSITY 25/25

REFRACTIVE INDEX nD20 1,4700 -1,4760

REFRACTIVE INDEX nD25

OPTICAL ROTATION (°) 94,00 / 99,00

BOILING POINT (°C) 176 - 180

MELTING POINT (°C)

FLASH POINT (°C) 47,00

ASSAY (% GC)

ACID VALUE (mg KOH/g)

SOLUBILITY INSOLUBLE IN WATER VAPOUR PRESSURE NOT DETERMINED OTHER SOLUBILITIES SOLUBLE IN ETHANOL

OTHER TECHNICAL DATA

STABILITY AND STORAGE

KEEP IN TIGHTLY CLOSED CONTAINER IN A COOL AND DRY PLACE, PROTECTED FROM LIGHT. WHEN STORED:

MORE THAN 24 MONTHS, QUALITY SHOULD BE CHECKED BEFORE USE. KEEP

BETWEEN 10-1SOC, PURGE HEADSPACE WITH NITROGEN.

WE BEUEVE THE ABOVE INFORMATION TO SE CORRECT BUT WE DON NOT PRESENT IT AS ALL INCLUSIVE AND AS SUCH SHOULD BE USED AS A GUIDE. THE SOLE RESPONSIBIUTY OF TI-'E RECEIVER OF OUR PRODUCT TO COMPLY WITH THE EXSISTING REGULATIONS AND INSTRUCTIONS.

THIS PRODUCT HAS MOT BE::E FILTERED DUE TO TECHNOLOGICAL: REASONS. WE RECOMMEND NOT TO USE IT UNLESS FILTERED WHEN USED A RAW MAIERIAL IN FOOD INTENDED FOR FINAL CONSUMERS,

FOR

ITIS



VEGAN / VEGETARIAN DECLARATION

Produ	ct: BLOOD ORANGE
	ereby inform that, to the best of our knowledge, the above-mentioned material is suitable for the ring diets:
,	Vegan Does not contain any ingredient of animal origin (mammalian, poultry, fish, crustacean, mollusc) or animal derivatives (dairy, egg and bee products) including additives and processing aids.
	Vegetarian Does not contain any ingredient of animal origin (mammalian, poultry, fish, crustacean, mollusc) or dairy and egg products, including adelitives and processing aids. Bee products (e.g. honey, bees wax) are acceptable.
	Ovo-Lacto Vegetarian Does not contain any ingredient of animal origin (mammalian, poultry, fish, crusta bean, mollusc including additives and processing aids. Dairy, egg and bee products (e.g. honey, beeswax) are acceptable.
'Anim	al' refers to the entire animal kingdom, i.e. vertebrates and multicellular invertebrates.

The information contained herein is to the best of our knowledge reliable. However, it should be noted that it is the responsibility of the manufacturer of the material containing this ingredient to identify and comply with all legal requiremnets.

This document is electronically generated and therefore not signed.