CERTIFICATE OF ANALYSIS

PRODUCT DESCRIPTION
APPEARANCE
BATCH NUMBER
Best Before

ORANGE OIL BITTER ORANGE LIQUID 4534102 February 2027

ANALYSIS	RESULTS	SPECIFICATION
Refractive Index 20degC	1.474	>= 1.472 <= 1.478
Specific Gravity (20c)	0.845	>= 0.845 <= 0.855

This certificate of analysis has been issued by an automatic system controlled by the Quality Control Department. Therefore this certificate is valid without any signature.

Allergen Analysis

Compound Name : ORANGE OIL BITTER

fragrance ingredient			n present as a p for absent in fra	
	CAS No.	Added as such	From natural & other sources	Total
alpha-iso-Methylionone	127-51-5	A	А	A
Amyl Cinnamal	122-40-7	A	А	А
Amylcinnamyl Alcohol	101-85-9	A	A	А
Anise Alcohol	105-13-5	A	A	А
Benzyl Alcohol	100-51-6	A	A	А
Benzyl Benzoate	120-51-4	A	А	А
Benzyl Cinnamate	103-41-3	A	A	А
Benzyl Salicylate	118-58-1	A	А	А
Butylphenyl Methylpropional (Lilial)	80-54-6	A	А	A
Cinnamal	104-55-2	A	A	А
Cinnamyl Alcohol	104-54-1	A	А	А
Citral	5392-40-5	A	0.13	0.13
Citronellol	106-22-9	A	А	А
Coumarin	91-64-5	A	A	A
Eugenol	97-53-0	A	A	A
Evernia Furfuraceae (Tree Moss) Extract	90028-67-4	A	А	A
Evernia Prunastri (Oak Moss) Extract	90028-68-5	A	A	A
Farnesol	4602-84-0	A	А	А
Geraniol	106-24-1	A	А	А
Hexyl Cinnamal	101-86-0	A	А	A
Hydoxycitronellal	107-75-5	A	А	А
Hydroxyisohexyl 3-Cyclohexene Carboxaldehyde (Lyral)	31906-04-4	A	А	А
Isoeugenol	97-54-1	A	А	А
Limonene	5989-27-5	A	95.80	95.80
	7705-14-8			
Linalool	78-70-6	A	0.24	0.24
Methyl 2-Octynoate	111-12-6	A	А	А

Production of Bitter Orange Oil



Food Allergen Declaration

According to (EU) 1169/2011

Compound Name : ORANGE OIL BITTER

We have carefully reviewed the ingredients in this product.

Allergen Source	Present
Celery and products thereof	No
Crustaceans and products thereof	No
Eggs and products thereof	No
Fish and products thereof	No
Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains) and products thereof	No
Lupin and products thereof	No
Milk and products thereof (including lactose)	No
Molluscs and products thereof	No
Mustard and products thereof	No
Nuts i.e. Almond, Hazelnut, Walnut, Cashew, Pecan nut, Brazil nut, Pistachio nut, Macadamia nut and Queensland nut and products thereof	No
Peanuts and products thereof	No
Sesame seeds and products thereof	No
Soybeans and products thereof	No
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO2	No

Vegan	Y	No ingredients of animal origin or animal derivatives, including additives and processing aids
Vegetarian	Y	No ingredients of animal origin, including additives and processing aids. No egg or dairy; bee products are allowed
Ovo-lacto Vegetarian	Y	May include egg, dairy and bee products. No other ingredients of animal origin or animal derivatives, including additives and processing aids are allowed
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GMO Declaration

According to 1829/2003/EC

Compound Name : ORANGE OIL BITTER

We have carefully reviewed the ingredients in this product for their potential genetically modified (GM) origin. The list includes ingredients which may be produced from other GM ingredients

Material	Present	Of GMO Origin
Chicory	No	-
Cotton	No	-
Maize	No	-
Potato	No	-
Rapeseed (Canola)	No	-
Soya	No	-
Sugar Beet	No	-
Tomato	No	-
Wheat	No	-

Product Name Orange oil bitter

We certify that the above product is in compliance with the Standards of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA), 49th Amendment

to the IFRA Code of Practice (published January,2020), provided it is used in the following class(es) at a maximum concentration level of:

IFRA Class	Maximum level of use (%)
Category 1	1.25
Category 2	1.25
Category 3	1.25
Category 4	1.25
Category 5A	1.25
Category 5B	1.25
Category 5C	1.25
Category 5D	1.25
Category 6	1.25
Category 7A	100
Category 7B	1.25
Category 8	1.25
Category 9	100
Category 10A	100
Category 10B	1.25
Category 11A	100
Category 11B	1.25
Category 12	100

Components

1 Citral 0.13% 2 3

The IFRA Standards regarding use restrictions are based on safety assessments by the panel of experts of the RIFM and are enforced by the IFRA Scientific Committee.

This Certificate provides restrictions for use of the specified product based only on those materials restricted by IFRA Standards for the toxicity endpoint(s) described in each Standard. This Certificate does not provide certification of a comprehensive safety assessment of all product constituents. It is the ultimate responsibility of our customer to ensure the safety of the final product with other tests if necessary.

ANNEX : Definition of IFRA Classes 49th Amendment

IFRA class	Product application
Category 1	Lip Products of all types (solid and liquid lipsticks, balms, clear or colored, etc.)
	Children's toys
Category 2	Deodorant and antiperspirant products of all types including any product with intended or reasonably
	foreseeable use on the axillae or labelled as such (spray, stick, roll-on, under-arm, deocologne, etc.)
	Body sprays (including body mist)
Category 3	Eye products of all types (eye shadow, mascara, eyeliner, eye make-up, eye masks, eye pillows, etc.)
	including eye care and moisturizer.
	Facial make up and foundation
	Make-up remover for face and eyes
	Nose pore strips
	Wipes or refreshing tissues for face, neck, hands, body
	Body and face paint (for children and adults)
0.1	Facial masks for face and around the eyes
Category 4	Hydroalcoholic and non-hydroalcoholic fine fragrance of all types (Eau de Toilette, Parfum, Cologne,
	solid perfume, fragrancing cream, aftershaves of all types, etc.)
	Fragranced bracelets
	Ingredients of perfume kits and fragrance mixtures for cosmetic kits
	Scent pads, foil packs Scent strips for hydroalcoholic products
Category 5A	Body creams, oils, lotions of all types
Calegory JA	Foot care products (creams and powders)
	Insect repellent (intended to be applied to the skin)
	All powders and talc (excluding baby powders and talc)
Category 5B	Facial toner
00.090.902	Facial moisturizers and creams
Category 5C	Hand cream
0,	Nail care products including cuticle creams, etc.
	Hand sanitizers
Category 5D	Baby cream/lotion, baby oil, baby powders and talc
Category 6	Toothpaste
	Mouthwash, including breath sprays
	Toothpowder, strips, mouthwash tablets
Category 7A	Hair permanent or other hair chemical treatments (rinse-off) (e.g. relaxers), including rinse-off hair dyes
Category 7B	Hair sprays of all types (pumps, aerosol sprays, etc.)
	Hair styling aids non sprays (mousse, gels, leave- on conditioners)
	Hair permanent or other hair chemical treatments (leave-on) (e.g. relaxers), including leave-on hair dyes
	Shampoo - Dry (waterless shampoo)
Cotogon (9	Hair deodorizer
Category 8	Intimate wipes
	Tampons Baby wipes
	Toilet paper (wet)
Category 9	Bar soap
Category 5	Shampoo of all type
	Cleanser for face (rinse-off)
	Conditioner (rinse-off)
	Liquid soap
	Body washes and shower gels of all types
	Baby wash, bath, shampoo
	Bath gels, foams, mousses, salts, oils and other products added to bathwater
	Foot care products (feet are placed in a bath for soaking)
	Shaving creams of all types (stick, gels, foams, etc.)
	All depilatories (including facial) and waxes for mechanical hair removal
	Shampoos for pets

IFRA class	Product application
Category 10A	Hand wash laundry detergent (including concentrates) Laundry pre-treatment of all types (e.g.paste, sprays, sticks) Hand dishwashing detergent (including concentrates) Hard surface cleaners of all types (bathroom and kitchen cleansers,furniture polish, etc.) Machine laundry detergents with skin contact (e.g. liquids, powders) including concentrates Dry cleaning kits Toilet seat wipes Fabric softeners of all types including fabric softener sheets Household cleaning products, other types including fabric cleaners, soft surface cleaners, carpet cleaners, furniture polishes sprays and wipes, leather cleaning wipes, stain removers, fabric enhancing sprays, treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics) Floor wax Fragranced oil for lamp ring, reed diffusers, pot-pourri, liquid refills for air fresheners (non-cartridge
Category 10B	systems), etc. Ironing water (Odorized distilled water) Animal sprays – sprays applied to animals of all types Air freshener sprays, manual, including aerosol and pump
Category 11A	Aerosol/spray insecticides Feminine hygiene conventional pads,liners, interlabial pads Diapers (baby and adult) Adult incontinence pant, pad
Category 11B	Toilet paper (dry) Tights with moisturizers Scented socks, gloves Facial tissues (dry tissues) Napkins Paper towels Wheat bags
Category 12	 Facial masks (paper/protective) e.g.surgical masks not used as medicaldevice Fertilizers, solid (pellet or powder) Candles of all types (including encased) Laundry detergents for machine wash with minimal skin contact (e.g. Liquid tabs, pods) Automated air fresheners and fragrancing of all types (concentrated aerosol with metered doses (range 0.05-0.5mL/spray), plug-ins, closed systems, solid substrate, membrane delivery, electrical, powders, fragrancing sachets, incense, liquid refills (cartridge), air freshening crystals) Air delivery systems Cat litter
	Cell phone cases Deodorizers/maskers not intended for skin contact (e.g. fabric drying machine deodorizers, carpet powders) Fuels Insecticides (e.g. mosquito coil, paper, electrical, for clothing) excluding aerosols/sprays Joss sticks or incense sticks Dishwash detergent and deodorizers – for machine wash Olfactive board games Paints Plastic articles (excluding toys) Scratch and sniff Scent pack Scent delivery system (using dry air technology)
	Scent derivery system (dsing dry an technology) Shoe polishes Rim blocks (Toilet)

SAFETY DATA S CLP: According to 2015/830/F		Printed on 25 June 2021
Version 1 Revised 08/0 10:01:47	06/2021	
Section 1. Identification	n of the substance/mixture and	of the company/undertaking
1.1 Product I dentifier		
Product Name	ORANGE OIL BITTER	
Alternative Name	.	
REACH Reg No	Not registered	
1.2 Relevant identified	uses of the substance or mixtur	re and uses advised against
Concentrated material	for manufacturing purposes only	
1.3 Details of the supp	lier of the safety data sheet	
	Madar Corporation Limited 19 - 20 Sandleheath Industrial Est	ato
	Fordingbridge	ate
	SP6 1PA	
Telephone Number	+44 (0)1425 655 555	
Email Address	technical@madarcorporation.co.uk	(
1.4 Emergency Tel No	+44 (0)1425 655 555	
Section 2. Hazard I den	tification	
2.1 Classification of th	e substance or mixture	
FL 3	Flammable liquid, category 3	
AH 1	Aspiration hazard, category 1	
SCI 2	Skin corrosion/irritation, category	2
SS 1B	Skin sensitisation, category 1B	
EH C2	Aquatic hazard, chronic, category	2
L		

SAFETY DA	ATA SHEET 015/830/EU	Printed on 25 June 2021
Version 1 Revis	red 08/06/2021 10:01:47	
CLP Label elen CLP classificat Hazard Picto	ion according to Regulation (EC	c) No 1272/2008
Signal Word	Danger	
Hazard State	ements	
H226	Flammable liquid and	vapour
H304	May be fatal if swallo	wed and enters airways
H315	Causes skin irritation	
H317	May cause an allergic	skin reaction
H411	Toxic to aquatic life v	vith long lasting effects
Precautional	ry Statements	
P210	Keep away from heat other ignition sources	, hot surfaces, sparks, open flames and No smoking.
P261	Avoid breathing fume	S.
P273	Avoid release to the	environment.
P280	Wear protective glove	es and eye protection
P331	Do NOT induce vomit	ing.
P391	Collect spillage.	
		may produce an allergic reaction
	DOSITION / INFORMATION ON INC	

SAFETY DATA SHEET

Printed on 25 June 2021

CLP: According to 2015/830/EU

Version 1 Revised 08/06/2021 10:01:47

ID Numbers	Chemical Name, Classification and Hazards	Conc (%)
CAS 5989-27-5 FINECS 227-813-5	d-Limonene (p-Mentha-1,8-diene)	>=25%
REACH	AH 1;SCI 2;SS 1B;EH A1,C1 H304,H315,H317,H400,H410	>=25%
CAS 123-35-3 FINECS 204-622-5	Myrcene	>=1%.<3%
REACH	FL 3;AH 1;SCI 2;EDI 2 H226,H304,H315,H319	///////////////////////////////////////
CAS 80-56-8 EINECS 201-291-9	alpha-Pinene	>=0.1%.<1%
REACH	AH 1; SCI 2; SS 1B; EH A1, C1 H304, H315, H317, H400, H410	>=0.178,<178

Refer to section 16 for the wording of listed classification and hazard statement codes

Section 4. First Aid measures

Take phrases in sections 2 into account

- 4.1 Description of first aid measures
 - After inhalation

Remove from the exposure area to fresh air. Contact a doctor if necessary.

After skin contact

Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation persists or there is any sign of tissue damage.

After eye contact

Flush with plenty of water and seek medical advice if necessary.

After ingestion

Wash mouth with plenty of water and obtain medical advice immediately.

- 4.2 Most important symptoms and effects, both acute and delayed No further information available at this time
- 4.3 Indication of immediate medical attention and special treatment needed No further information available at this time

Section 5. Fire-fighting measures

- 5.1 Extinguishing Media
 - Carbon dioxide, foam or dry powder DO NOT USE A DIRECT WATER JET.

The information contained herein is true and accurate to the best of our knowledge. All information is valid until revisions are issued. However, the accuracy of this information cannot be guaranteed by the company as the data has been obtained from different sources. We will not, therefore, accept liability for misuse of this data resulting in damage or loss.

SAFETY DATA SHEET CLP: According to 2015/830/EU	Printed on 25 June 2021				
Version 1 Revised 08/06/2021 10:01:47					
5.2 Special hazards arising from the substance or mixture May produce Carbon dioxide and unidentified organic compounds.					
5.3 Advice for fire-fighters Wear protective clothing and avoid inhalation of vapours.					
Section 6. Accidental release measures					
 6.1 Personal precautions, protective equipment and er Remove all sources of ignition. Avoid inhalation, skin and eye contact. Ensure proper ventilation. 	nergency procedures				
 6.2 Environmental precautions Do not discharge directly into drains or the soil. Keep awa water 	ay from surface and ground				
 6.3 Methods and material for containment and cleaning Soak up spillage with sand or other inert absorbant mater vemiculite; transfer used material to a suitable waste cont accordance with regulations. 6.4 Reference to other sections 	ial such as earth or				
Refer to information in Sections 7, 8 and 13					
Section 7. Handling and storage					
7.1 Precautions for safe handling Maintain good occupational and personal hygiene. Avoid ir and eyes.	nhalation and contact with skin				
7.2 Conditions for safe storage, including any incompa Store in tightly sealed original containers away from ignition					
7.3 Specific end use(s) No further information available					
Section 8. Exposure controls / personal protection					
8.1 Control Parameters No information available					
8.2 Exposure controls Engineering controls No information available					

SAFETY DATA SHEET CLP: According to 2015/830/EU	Printed on 25 June 2021				
Version 1 Revised 08/06/2021 10:	01:47				
Always wash routinely before break Eye/face protection Wear safety goggles. Hand protection	hemical personal protective equipment advice. s, meals and at the end of the work period.				
Wear chemically resistant disposable gloves. Other skin protection Wear overalls. Always wash routinely before breaks, meals and at the end of the work period. Respiratory protection Not generally required. Use inhalation protection in poorly ventilated areas					
Thermal hazards No information available Environmental exposure contro No information available	s				
Section 9. Physical and chemical p	roperties				
9.1 Information on basic physical and chemical properties					
FLASH POINT (°C)	46				
Colour	ORANGE				
Aroma	TYPICAL OF BITTER ORANGE				
Solubility	INSOLUBLE				
9.2 Other information No further information available					
Section 10. Stability and reactivity					
10.1 Reactivity Not determined 10.2 Chemical Stability Not determined					
10.3 Possibility of hazardous reactions Not determined					

SAFETY DATA SHEET CLP: According to 2015/830/EU	Printed on 25 June 2021				
Version 1 Revised 08/06/2021 10:01:47					
10.4 Conditions to avoid Extreme temperatures					
 10.5 Incompatible materials Highly reactive chemicals which may produce unknown reaction products and so cause additional hazards. 10.6 Hazardous decomposition products Not determined 					
Section 11. Toxicological information					
11.1 Information on toxicological effects Acute toxicity No data available					
Skin corrosion / irritation No data available					
Serious eye damage / irritation No data available					
Respiratory or skin sensitisation No data available					
Germ cell mutagenicity No data available					
Carcinogenicity No data available					
Reproductive toxicity No data available					
STO-single exposure No data available					
STO-repeated exposure No data available					
Aspiration hazard No data available					
Information on likely routes of exposure No data available					

SAFETY DATA SHEET Printed on 25 June 2021 CLP: According to 2015/830/EU Version 1 Revised 08/06/2021 10:01:47 Symptoms related to the physical, chemical and toxicological characteristics No data available Delayed and immediate effects as well as chronic effects from short and long-term exposure No data available Interactive effects No data available Other information No data available Section 12. Ecological information 12.1 Toxicity No data available. Avoid soil, surface water and water-bearing stratum contamination. 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment No data available 12.6 Other adverse effects No data available Section 13. Disposal considerations Please refer to the information in section 8 (Exposure controls and personal protection) 13.1 Waste treatment methods Dispose in accordance with the law and local regulations. Treat as trade effluent. Section 14. Transport information 14.1 UN number 1169 14.2 UN proper shipping name EXTRACTS, AROMATIC, LIQUID

SAFETY DAT		Printed on 25 June 2027	
Version 1 Revised	08/06/2021 10:01:4)	7	
14.3 Transport ha	zard class(es) 3		
14.4 Packing grou	ib III		
Tunnel Code	(D/E)		
14.5 Environment No relevant inforr			
14.6 Special preca No relevant inforr			
14.7 Transport in Not applicable	bulk according to Anr	nex II of MARPOL73/78 and the IBC Code	
Section 15. Regula	tory information		
15.1 Safety, healt substance or mixt		regulations/legislation specific for the	
No relevant inform	mation available at this	time	
15.2 Chemical saf	ety assessment		
A chemical safety	assessment has not be	en carried out	
Section 16. Other i	nformation		
Full list of preca	autionary phrases		
P210		neat, hot surfaces, sparks, open flames and	
	Avoid breathing fumes.		
P261	Avoid breathing f	5	
P261 P264	•	3	
	Wash hands thore	umes.	
P264	Wash hands thore Contaminated wo	umes. bughly after handling rk clothing should not be allowed out of the	
P264 P272	Wash hands thore Contaminated wo workplace. Avoid release to t	umes. bughly after handling rk clothing should not be allowed out of the	
P264 P272 P273	Wash hands thoro Contaminated wo workplace. Avoid release to t Wear protective g	umes. oughly after handling rk clothing should not be allowed out of the he environment.	
P264 P272 P273 P280	Wash hands thoro Contaminated wo workplace. Avoid release to t Wear protective g	umes. bughly after handling rk clothing should not be allowed out of the the environment. gloves and eye protection Immediately call a POISON CENTRE.	
P264 P272 P273 P280 P301+P310	Wash hands thoro Contaminated wo workplace. Avoid release to t Wear protective g IF SWALLOWED: Do NOT induce vo	umes. bughly after handling rk clothing should not be allowed out of the the environment. gloves and eye protection Immediately call a POISON CENTRE.	
P264 P272 P273 P280 P301+P310 P331	Wash hands thord Contaminated wo workplace. Avoid release to t Wear protective g IF SWALLOWED: Do NOT induce vo If skin irritation o	umes. bughly after handling rk clothing should not be allowed out of the the environment. gloves and eye protection Immediately call a POISON CENTRE. pmiting.	

Printed on 25 June 2021

SAFETY DATA SHEET

CLP: According to 2015/830/EU

Version 1 Revised 08/06/2021 10:01:47

Wording of any hazard classes listed in section 3 FL 3 Flammable liquid, category 3 AH 1 Aspiration hazard, category 1 SCI 2 Skin corrosion/irritation, category 2 SS 1B Skin sensitisation, category 1B EDI 2 Eye damage/irritation, category 2 EH A1 Aquatic hazard, acute, category 1 FH C1 Aquatic hazard, chronic, category 1 Wording of any hazard statements listed in section 3 Flammable liquid and vapour H226 H304 May be fatal if swallowed and enters airways H315 Causes skin irritation May cause an allergic skin reaction H317 H319 Causes serious eye irritation H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects

PRODUCT SPECIFICATION

Specific Gravity (20c)		>= 0.845	<= 0.855
Refractive Index 20degC		>= 1.472	<= 1.478
Composition	:	Essential oil	
Appearance / Physical State	:	ORANGE LIQUID	
Aroma / Taste	:	TYPICAL OF BITTER ORANGE	
Flash Point deg C	:	46	
Product Name	:	ORANGE OIL BITTER	

Shelf Life : 12 Months

(if stored in full airtight containers, protected from heat and direct sunlight)

Version Number : 6 Version Date : 25 June 2021