

CERTIFICATE OF ANALYSIS

PRODUCT DESCRIPTION : CARAWAY ESSENTIAL OIL
APPEARANCE : CLEAR VERY PALE YELLOW

CODE : LIQUID
BATCH NUMBER : OE.CARA
BEST BEFORE END : 4561804

November 2027

ANALYSIS	RESULTS	SPECIFICATION
Refractive Index 20degC	1.488	>= 1.484 <= 1.490
Optical Rotation	75.8	>= 65.0 <= 81.0
Specific Gravity (20c)	0.912	>= 0.904 <= 0.920



Allergen Analysis

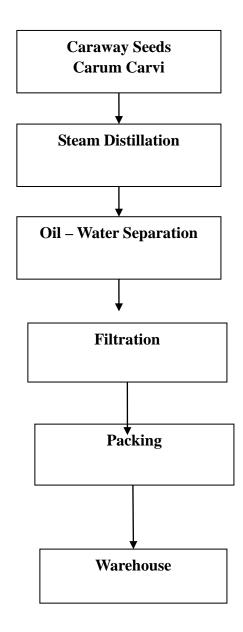
Compound Name : CARAWAY ESSENTIAL OIL

flavour ingredient	CASNo	Concentration present as a percentage (%) or 'A' for absent in flavour		
navour ingredient	CAS No.	Added as such	From natural & other sources	Total
alpha-iso-Methylionone	127-51-5	A	А	А
Amyl Cinnamal	122-40-7	A	А	А
Amylcinnamyl Alcohol	101-85-9	A	А	А
Anise Alcohol	105-13-5	A	А	А
Benzyl Alcohol	100-51-6	A	Α	Α
Benzyl Benzoate	120-51-4	A	А	Α
Benzyl Cinnamate	103-41-3	A	Α	Α
Benzyl Salicylate	118-58-1	A	А	Α
Butylphenyl Methylpropional (Lilial)	80-54-6	A	А	Α
Cinnamal	104-55-2	A	А	Α
Cinnamyl Alcohol	104-54-1	A	А	Α
Citral	5392-40-5	A	А	А
Citronellol	106-22-9	A	А	Α
Coumarin	91-64-5	A	А	А
Eugenol	97-53-0	A	А	А
Evernia Furfuraceae (Tree Moss) Extract	90028-67-4	A	А	Α
Evernia Prunastri (Oak Moss) Extract	90028-68-5	A	А	А
Famesol	4602-84-0	A	А	А
Geraniol	106-24-1	A	А	А
Hexyl Cinnamal	101-86-0	A	А	А
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	40.00	40.00
Linalool	78-70-6	A	А	А
Methyl 2-Octynoate	111-12-6	A	А	А

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Process flow of Caraway Oil





GMO Declaration

According to 1829/2003/EC

Compound Name : CARAWAY ESSENTIAL OIL

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	-
Rape	No	-
Soya	No	-
Sugar Beet	No	-
Tomato	No	-
Wheat	No	-

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IFRA Conformity Certificate

: CARAWAY ESSENTIAL OIL Compound Name

We certify that the above compound is in compliance with the standards of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA-48th amendment), provided it is used at a maximum concentration level of:

IFRA category (*)	Maximum level of use (%)(w/w) (**)
1 (***)	N/A (***)
2	N/A
3A	N/A
3B	N/A
3C	N/A
3D	N/A
4A	N/A
4B	N/A
4C	N/A
4D	N/A
5	N/A
6 (***)	N/A (***)
7A	N/A
7B	N/A
8A	N/A
8B	N/A
9A	N/A
9B	N/A
9C	N/A
10A	N/A
10B	N/A
11	N/A

- (*) See annex for definition of IFRA categories
- (**) Usage limit N/A = Not Applicable; no IFRA restrictions (***) IFRA 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

The IFRA Standards regarding restrictions are based on safety assessments by the Panel of Experts of the RESEARCH INSTITIUTE 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.

It is the ultimate responsibility of our customer to ensure the safety of the final product (containing this fragrance) by further testing if need be.

Annex: Definition of IFRA QRA categories

Finished Product Types	I FRA category
Lip Products of all types (solid and liquid lipsticks, balms, clear or colored, etc.) Children's Toys	1
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, deo-cologne and body spray, etc.) Nose Pore Strips Fragranced Bracelets	2
Hydroalcoholic Products Applied To Recently Shaved Skin (includes After Shave) - EdT	3A
Hydroalcoholic Products Applied To Recently Shaved Skin (Includes After Shave) - Fine Fragrance	3B
Eye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc.) including eye care Men's Facial Creams and Balms Baby Creams, Lotions, Oils Body Paint for Children	3C
Tampons	3D
EdT - Hydroalcoholic Products applied to unshaved skin (includes aqueous based, alcoholic based and hydroalcoholic) like Cologne,eau de cologne, Eau de Parfum or Parfum Ingredients of Perfume Kits Scent Pads, Foil packs Scent Strips for hydroalcoholic products	4A
Fine Fragrance - Hydroalcoholic Products applied to unshaved skin (includes aqueous based, alcoholic based and hydroalcoholic) like Cologne,eau de cologne, Eau de Parfum or Parfum	4B
Hair Styling Aids Sprays of all types (pumps, aerosol sprays, etc.) Body Creams, Olls, Lotions of all types (except baby creams, lotions and oils) Body sprays (including Body Mist) with no intended or reasonably foreseeable use on the axillae Fragrance Compounds for Cosmetic Kits Foot Care Products Hair deodorant Body Paint (except those for children)	4C
Fragrancing Cream, Solid Perfumes	4D
Facial Masks Women's Facial Creams/Facial Make-up, Hand Cream, Hand sanitizers, Baby Powder and 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	5(*) 5
Mouthwash, including Breath Sprays, Toothpaste	6
Intimate Wipes, Baby Wipes	7A
Insect Repellent (intended to be applied to the skin)	7B
Make-up Removers of all types (not including face cleansers), Hair Styling Aids Non-Spray of all types (mousse, gels, leave-conditioners, etc.), Nail Care, Powders and talcs, all types (except baby powders and talcs)	8A
Hair Dyes	8B
Conditioner (Rinse-Off), Liquid Soap, 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.), All Depilatories (including waxes for mechanical hair removal), Body Washes of all types (including baby washes) and Shower Gels of all types, Bar Soap (Toilet Soap), Bath Gels, Foams, Mousses, Salts, Oils and Other Products added to bathwater	9A
Feminine hygiene - pads, liners, Toilet paper, Wheat bags	9B
Facial tissues, Napkins, Paper towels, Other Aerosols (including air freshener sprays and air freshener pump sprays, but not including deodorants/antiperspirants, hair styling aids sprays)	9C

Annex: Definition of IFRA QRA categories - continued

Finished Product Types		
Handwash Laundry Detergents of all types including concentrates, Fabric Softeners of all types including fabric softener sheets, Household Cleaning Products, Other Types (fabric cleaners, soft surface cleaners, carpet cleaners, etc.), Machine Wash Laundry Detergents (liquids, powders, tablets, etc.) including laundry bleach and concentrates, Hand Dishwashing Detergent including concentrates, Hard Surface Cleaners of all types (bathroom and kitchen cleansers, furniture polish, etc.), Shampoos for pets, Dry cleaning kits, Scented gloves, socks, tights with moisturizers	10A	
Diapers, Toilet seat wipes	10B	
All non-skin contact or incidental skin contact including:	11	
Candles, Air Fresheners and Fragrancing of all types (concentrated aerosol with metered doses (range 0.05-0.5mL/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). Brobe Polishes, Deodorizers/Maskers not intended for skin contact (e.g. fabric drying machine deodorizers, 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 nebulization), Air freshening crystals, Toilet Blocks, Joss Sticks or Incense Sticks, Machine Dishwash Detergent and Deodorizers, Machine-only Laundry Detergent (e.g. liquitabs)**, Plastic articles (excluding toys), Fuels, Fragranced lamp ring, 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, deodorizers for textiles or fabrics), Floor Wax, Odored 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.

^{*} 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.

^{**} Liquitabs corresponds to a dose of liquids wrapped in a film: no contact with hands is expected under normal conditions of use



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Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name CARAWAY ESSENTIAL OIL

Alternative Name

REACH Reg No Not registered

1.2 Relevant identified uses of the substance or mixture and uses advised against Concentrated material for fragrance and flavouring use

1.3 Details of the supplier of the safety data sheet

MADAR Corporation Ltd

19-20 Sandleheath Industrial Estate

Fordingbridge Hampshire SP6 1PA

Telephone Number +44 (0)1425 655555

Email Address technical@madarcorporation.co.uk

1.4 Emergency Tel No +44 (0)1425 655555

Section 2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

FL 3	Flammable liquid, category 3
ATO 5	Acute toxicity, oral, category 5
AH 1	Aspiration hazard, category 1
ATD 4	Acute toxicity, dermal, category 4
SCI 2	Skin corrosion/irritation, category 2
SS 1	Skin sensitisation, category 1
EH A1	Aquatic hazard, acute, category 1
EH C1	Aquatic hazard, chronic, category 1

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2.2 Label elements

GHS classification according to Regulation (EC) No 1272/2008

Hazard Pictograms



Signal Word Danger

Hazard Statements

H226 Flammable liquid and vapour H303 May be harmful if swallowed

H304 May be fatal if swallowed and enters airways

H312 Harmful in contact with skin

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Precautionary Statements

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

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection

P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE.

P331 Do NOT induce vomiting.

P391 Collect spillage.

2.3 Other Hazards

Contains Limonene which may produce an allergic reaction

No further information available at this time

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Section 3. Composition / information on ingredients

Any percentage values listed here for hazardous components are for illustrative purposes only

3.1 Substances

Description CARAWAY ESSENTIAL OIL

EC/EINECS 288-921-6
CAS Number 85940-31-4
USCAS Number 8000-42-8

Hazardous components

ID Numbers	nbers Chemical Name, Classification and Hazards	
CAS 99-49-0 Carvone EINECS 202-759-5 REACH FL 4; ATD 5(3800); SS 1B; EH A2 H227, H313, H317, H401		55.0000
CAS 5989-27-5 EINECS 227-813-5 REACH	EINECS 227-813-5 4	
CAS 2111-75-3 EINECS 218-302-8 REACH	Perilla aldehyde (p-Mentha-1,8-dien-7-al) ATO 5(2500); SCI 3; SS 1B H303,H316,H317	0.1000

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

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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.

- 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 emergency procedures Remove all sources of ignition.

Avoid inhalation, skin and eye contact.

Ensure proper ventilation.

6.2 Environmental precautions

Do not discharge directly into drains or the soil. Keep away from surface and ground water

6.3 Methods and material for containment and cleaning up

Soak up spillage with sand or other inert absorbant material such as earth or vemiculite; transfer used material to a suitable waste container and dispose in accordance with regulations.

6.4 Reference to other sections

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 inhalation and contact with skin and eyes.

- 7.2 Conditions for safe storage, including any incompatibilities

 Store in tightly sealed original containers away from ignition sources and in a cool place.
- 7.3 Specific end use(s)

No further information available

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Section 8. Exposure controls / personal protection

8.1 Control Parameters

No information available

8.2 Exposure controls

Engineering controls

No information available

Individual protection measures

Refer to Section 5 for specific fire/chemical personal protective equipment advice. Always wash routinely before breaks, meals and at the end of the work period.

Eye/face protection

Wear safety goggles.

Hand protection

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 controls

No information available

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

FLASH POINT (°C) 59

Colour CLEAR VERY PALE YELLOW

Aroma GRIPE WATER
Solubility INSOLUBLE

9.2 Other information

No further information available

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Section 10. Stability and reactivity

10.1 Reactivity

Not determined

10.2 Chemical Stability

Not determined

10.3 Possibility of hazardous reactions

Not determined

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

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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

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

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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

14.3 Transport hazard class(es) 3

14.4 Packing group III

Tunnel Code (D/E)

14.5 Environmental Hazards

No relevant information available

14.6 Special precautions for user

No relevant information available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable

Section 15. Regulatory information

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

No relevant information available at this time

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out

Section 16. Other information

Full list of precautionary phrases

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

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection

P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE.

P331 Do NOT induce vomiting.

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P391	Collect spillage.
Wording of any haza	rd classes listed in section 3
FL 4	Flammable liquid, category 4
ATO 5	Acute toxicity, oral, category 5
AH 1	Aspiration hazard, category 1
ATD 5	Acute toxicity, dermal, category 5
SCI 2	Skin corrosion/irritation, category 2
SCI 3	Skin corrosion/irritation, category 3
SS 1B	Skin sensitisation, category 1B
EH A1	Aquatic hazard, acute, category 1
EH A2	Aquatic hazard, acute, category 2
EH C1	Aquatic hazard, chronic, category 1
Wording of any haza	rd statements listed in section 3
H227	Combustible liquid
H303	May be harmful if swallowed
H304	May be fatal if swallowed and enters airways
H313	May be harmful in contact with skin
H315	Causes skin irritation
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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PRODUCT SPECIFICATION

Product Name : CARAWAY ESSENTIAL OIL

Flash Point deg C : 59

Aroma / Taste : GRIPE WATER

Appearance / Physical State : CLEAR VERY PALE YELLOW LIQUID

Composition : 100% ESSENTIAL OIL

Refractive Index 20degC \Rightarrow 1.484 < 1.490

Optical Rotation >= 65.0 <= 81.0

Specific Gravity (20c) >= 0.904 <= 0.920

Store in full airtight containers, protected from heat and direct sunlight.

Version Number : 1 Version Date : 10 December 1996



Vegetarian Declaration

Compound Name : CARAWAY ESSENTIAL OIL

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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