

#### **CERTIFICATE OF ANALYSIS**

Product Name CELERY SEED OIL Product Code EO - 1016

Lot Number 4470605 Botanical Name Apium Graveolend L

Best Before May 2025 Production Method Steam distillation

Country of Origin India

| Parameter                      | Specification | Result | Method |
|--------------------------------|---------------|--------|--------|
| Physical and Analytical Parame | ters          |        |        |

| 1                        |                                      |                    |              |
|--------------------------|--------------------------------------|--------------------|--------------|
| Appearance               | Free flowing clear liquid            | Complies           | Visual       |
| Colour                   | Pale yellow to Light                 |                    |              |
| Colour                   | Brown                                | Complies           | Visual       |
| Odour _                  | Characteristic pleasant              |                    |              |
|                          | aroma of indian celery               | Complies           | Organoleptic |
| Specific gravity at 25°C | 0.870 to 0.910                       | 0.8710             | FCC          |
| Refractive Index at 20°C | 1.4720 to 1.490                      | 1.4790             | FCC          |
| Optical rotation         | +48 <sup>0</sup> to +78 <sup>0</sup> | +70.9 <sup>0</sup> | FCC          |

#### **Heavy Metal Analysis**

| Total Heavy Metals | < 10 ppm  | Complies | ICP - MS |
|--------------------|-----------|----------|----------|
| Arsenic            | < 1 ppm   | Complies | ICP – MS |
| Lead               | < 3 ppm   | Complies | ICP – MS |
| Mercury            | < 0.1 ppm | Complies | ICP – MS |
| Cadmium            | < 1 ppm   | Complies | ICP - MS |

Warning: The product is irritant, avoid contact with skin and eyes.

Storage: Do not store in close proximity to heat, sparks, open flames, strong acids, and strong bases. To minimise product degradation, avoid prolonged exposure of the material to air. Keep container tightly closed when not in use. Mix well before use.

Shelf life: Not more than 3 Years, when stored as recommended above.



| ALLERGENS DECLARATION |                 |  |
|-----------------------|-----------------|--|
| Product Name          | CELERY SEED OIL |  |
|                       |                 |  |

Directive 2000/13/EC regarding labelling, presentation and advertising of Foodstuffs, Article 6(3a), 10 & 11, and Annex 111a, as amended by Directive 2007-68-EC, establishes a list of food ingredients which must be indicated on the label of foodstuffs as they are likely to cause adverse reactions in susceptible individuals.

| COMPONENT   | PRESENT IN THE PRODUCT | PRESENT IN<br>THE SOURCE | PRESENT IN SAME LINE | PRESENT IN<br>SAME<br>PLANT |
|---|------------------------|--------------------------|----------------------|-----------------------------|
| Cereals containing gluten (i.e. Wheat, rye, barley, oats, spelt, kamut or their hybridised strains and products thereof, except,  a) wheat based glucose syrups including dextrose  b) Wheat based maltodextrins  c) glucose syrups based on barley  d) cereals used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages.  | Nil                    | Nil                      | Nil                  | Nil                         |
| Crustaceans and products thereof  | Nil                    | Nil                      | Nil                  | Nil                         |
| EGGS and products thereof   | Nil                    | Nil                      | Nil                  | Nil                         |
| FISH and products thereof except:- a) fish gelatine used as a carrier for vitamin or carotenoid preparations b) fish gelatine or isinglass used as fixing agent in beer and wine.   | Nil                    | Nil                      | Nil                  | Nil                         |
| Peanuts and products thereof  | Nil                    | Nil                      | Nil                  | Nil                         |
| Soybeans and products thereof, except  a) fully refined soybean oil and fat  b) natural mixed tocopherols (E306) natural D-alpha tocopherol, natural D-alpha tocopherol acetate, natural D-alpha tocopherol succinate from soybean sources  c) vegetable oils derived phytosterols and phytostrol esters from soybean sources  d) plant stanol ester produced from vegetable oil sterols from soybean   | Nil                    | Nil                      | Nil                  | Nil                         |
| MILK and products thereof (including lactose), except  a) whey used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages  b) Lactitol   | Nil                    | Nil                      | Nil                  | Nil                         |
| Nuts i.e. almonds ( <i>Amygdalus communis L</i> ), hazelnuts ( <i>Corylus avellana</i> ), walnuts, ( <i>juglands regia</i> ), cashews ( <i>Anacardium occidientale</i> ), pecan nuts ( <i>Carya illinoises (Wangenh) K. Koch)</i> , Brazil nuts ( <i>Bertholletia excela</i> ), pistachio nuts ( <i>Pistacia vera</i> ), macadamia nuts and Queensland nuts <i>Macadamia ternifolia</i> ), and products thereof, except  a) nuts used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages. | Nil                    | Nil                      | Nil                  | Nil                         |



| Celery and Products thereof   | YES | YES | Nil | Nil |
|---|-----|-----|-----|-----|
| Mustard and products thereof  | Nil | Nil | Nil | Nil |
| Sesame seeds and products thereof   | Nil | Nil | Nil | Nil |
| Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10mg/litre as ${\rm SO}_2$ | Nil | Nil | Nil | Nil |
| Lupin and products thereof  | Nil | Nil | Nil | Nil |
| Molluscs and products thereof   | Nil | Nil | Nil | Nil |

| PREVENTION OF CROSS CONTAMINATION |  |  |
|-----------------------------------|--|--|
| Method                            | Working spaces and the equipments are cleaned and the goods are stored under standard conditions |  |

The above is based on the main allergens referred to in the following: -

FDA: The Food Allergen Labelling and Consumer Protection Act of 2004(August 2004) (Title II of Public Law 108-282) effective from 1<sup>st</sup> Jan 2006.

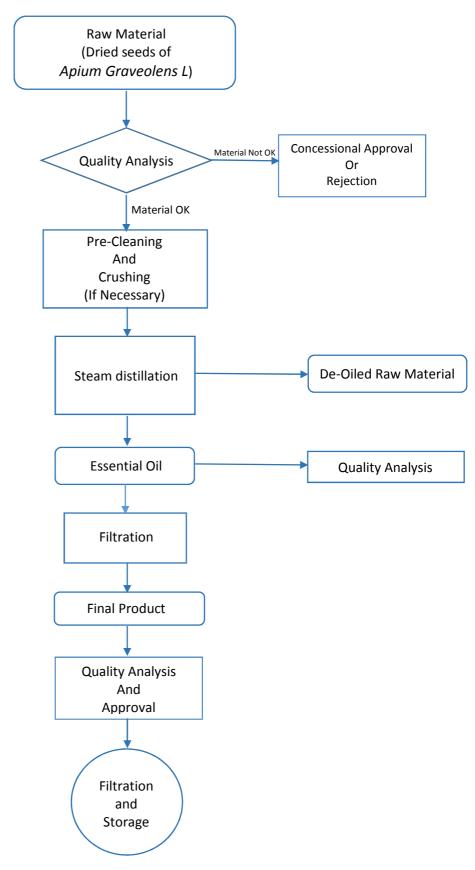
Annex IIIa, of the Council Directive (EC) No 2003/89 of the 10<sup>th</sup> November 2003, amending Directive 2000/13/EC as regards indication of the ingredients present in foodstuffs. Further amended by Council Directive 2007/68/EC of the 27<sup>th</sup> November 2007

Codex Alimentarius: General Standard for the labelling of pre-packaged foods, Codex Standard 1-1985 (Rev 1-1991)

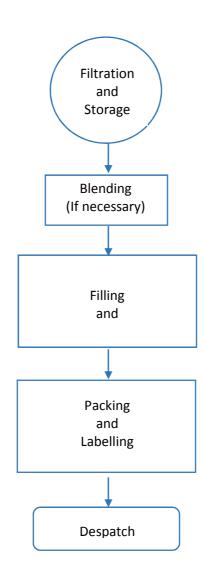
We hereby Declare that the information provided above is True to the best of our knowledge and hence the aforementioned Product does not Contain elements that cause Adverse reactions in Susceptible Individuals as per the references provided in the respective Columns.



#### PROCESS FLOWCHART FOR CELERY SEED OIL



# MYSTIC M@MENTS





24-06-2017

## IFRA 48<sup>TH</sup> AMENDMENT CONFIRMATION

PRODUCT NAME : CELERY SEED OIL

CAS NUMBER : 8015-90-5

FEMA NUMBER : 2271

CHEMICAL NAME : Apium Graveolens L

We hereby declare that the above material s confirms to the following requirements:

- The product is manufactured as per IFRA code of practices.
- The product is neither restricted nor prohibited by IFRA for use in Fragrances.
- Product is manufactured in keeping intention of the fragrance use.
- The product confirms to IFRA 48<sup>th</sup> amendment.



#### **SPECIFICATION SHEET / MATERIAL SAFETY DATA SHEET**

#### **SPECIFICATION SHEET**

Product : CELERY SEED OIL

CAS # 8015-90-5

| TEST                     | REQUIREMENT                      | RESULTS  |
|--------------------------|----------------------------------|----------|
| Appearance               | Free flowing liquid              | Conforms |
| Colour                   | Pale yellow to brownish yellow   | Conforms |
| Odour                    | Characteristic pleasant aroma of |          |
|                          | Indian Celery                    | Conforms |
| Specific gravity @25°C   | Between 0.870 and 0.910          | Conforms |
| Refractive Index @ 20° C | Between 1.4800 and 1.4900        | Conforms |
| Optical rotation         | Between +48 and +78              | Conforms |
| Limonene (by GC)         | 70-80 %                          | Conforms |
| Selinene (by GC)         | Minimum 10 %                     | Conforms |
| Heavy Metal              | Less than 5ppm                   | Conforms |
| Microbial                | Not Applicable                   | NA       |
|                          |                                  |          |

#### **QUALITY CONTROL:**

- 1. The product is subjected to all the required analysis to conform the internal specification (As detailed above).
- 2. The product is subjected gas chromatographic analysis to find out the percentage of Specific components, GC profile and impurities.
- 3. The product is subjected to careful organoleptic examination.

#### **STANDARDS:**

Oil confirms to internal specifications (As detailed above). Specific purpose blends can also be supplied on request.



#### **MATERIAL SAFETY DATA SHEET**

#### 1. IDENTIFICATION

Product Name : Celery seed oil Category of product : Essential oil

Description : The product is Natural and is obtained by the steam

Distillation of the seeds of Apium Graveolens L

CAS Number : 8015 - 90-5 Physical state : Liquid

Colour : Pale yellow to brownish yellow.

Company : Madar Corporation Limited

19 - 20 Sandleheath Industrial Estate

Fordingbridge Hampshire SP6 1PA

Phone: +44 (0)1425 655555

Email: technical@madarcorporation.co.uk

2. COMPOSITION

<u>CAS NO</u> <u>MAJOR INGREDIENTS</u>

5989-27-5 d- Limonene 17066-67-0 Beta Selinene 6066-49-5 n-Butyl Phthalide

------ EC Classifications------

SYMBOL(S)

Xi > Irritant

**RISK PHRASES** 

R10 > Flammable
R36 > Irritating to eyes
R38 > Irritating to skin
R22 > Harmful if swallowed

**SAFETY PHRASES** 

> Keep away from sources of ignition - No smoking

S24 > Avoid contact with skinS25 > Avoid contact with eyes



#### 3. HAZARDS IDENTIFICATION

#### **Risk Summary**

Flammable, Harmful if swallowed. It is irritating to eyes and skin.

#### 4. FIRST AID MEASURES

#### **Eye Contact**

Flush with water for at least 15 minutes. If irritation develops, get medical attention

#### **Skin contact**

Remove contaminated clothing. Wash affected area with plenty of soap water. If irritation develops, get medical attention.

#### **Inhalation**

Seek fresh air immediately. If breathing is difficult, get medical attention.

#### Ingestion

Drink lot of water to dilute substance. Get medical attention.

#### **5. FIRE FIGHTING MEASURES**

#### **Means to Extinguish**

Carbon dioxide, dry chemical, foam. If water must be used, use as a spray only.

#### **Unusual Fire/Explosion Hazards**

Flammable liquid. Avoid heat, sparks and open flames. Non explosive.

#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precaution

Specifically given in section 8.

#### **Environmental precautions**

Do not discharge into streams, ponds or Public waters.

#### **Cleanup Procedures**

Small spills should be adsorbed by dirt, sand or other adsorbent. Large spills may be diked and pumped into closed containers for recovery or disposal.



#### 7. HANDLING AND STORAGE

#### **Handling**

Wear safety glasses, rubber gloves and apron when handling.

#### **Storage**

Do not store in close proximity to heat, sparks, open flames, strong acids, and strong bases. To minimise product degradation, avoid prolonged exposure of the material to air. Keep container tightly closed when not in use.

#### **Shelf life**

Not more than 3 years, when stored as recommended above.

#### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### **EXPOSURE CONTROLS:**

#### **Ventilation**

Mechanical exhaust may be needed in confined and warm areas.

#### **Safety Station**

An eyewash and safety shower should be readily available.

#### **Contaminated Equipment**

Clean contaminated equipment with soap and water.

#### PERSONAL PROTECTION EQUIPMENT:

#### **Eye Protection**

As a precaution, wear safety glasses or goggles.

#### Hand protection

Wear standard industrial type rubber gloves.

#### **Skin Protection**

A rubber apron is recommended when handling large quantities of this material.

#### **Respiratory protection**

A respirator is not normally required. If vapor concentration is high use a organic vapour respirator.



#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Volatile clear mobile liquid
Colour : Pale yellow to brownish yellow

Odour : Characteristic pleasant aroma of Indian Celery

Boiling point : Not determined Vapour pressure : Not determined. Flash point :  $40^{\circ}$ C closed cup Oxidising properties : Not determined Explosive properties : Not explosive. Flammability limits : Not determined.

Specific Gravity @ 25°C : Between 0.870 and 0.910 Refractive index @ 20°C : Between 1.4800 and 1.4900

Optical rotation : Between +48 and +78

D-Limonene (by GC) : 70-80 %

Beta Selinene (by GC) : Minimum 10 %

Solubility in water (Weight %): < 0.1

Solubility in 90% Alcohol : 6 to 8 volume with turbidity

#### 10. STABILITY AND REACTIVITY

#### **Conditions to Avoid**

Prolonged or excessive heat and/or exposure to air may cause decomposition or oxidation of the material.

#### Materials to avoid

Contact with Chemicals may decompose the ingredients present in it. If possible avoid contact with all kinds of Chemical.

#### 11. TOXICOLOGICAL INFORMATION

Not Available

#### 12. ECOLOGICAL INFORMATION

Not Available

#### 13. DISPOSAL CONSIDERATION

In event of spillage, the oil can be contained by sand or soil and absorbed by paper from which the oil will evaporate.



#### 14. TRANSPORT INFORMATION

The oil can be safely stored or transported in sound metal drums or bottles at ambient temperatures. Store in full sealed containers, keep cool and protect from light to preserve quality, preferred container for long term storage - stainless steel or glass.

#### AIR FREIGHTS:

Air freights are done in conformance to latest IATA/ICAO regulations with the name and address of the notifying party on the cartons

#### 15. REGULATORY INFORMATION

#### **REGULATORY STATUS**

The product is listed in CAS
CAS# 8015- 90- 5
The product is registered in FDA, Fema and in the council of Europe.
FDA NO # 182.20
Fema NO # 2271
Council of Europe NO# 52n
H-No. #3301.29
H.S.CODE (CUSTOMS TARRIF CODE) # 3301 29 46

#### **16. OTHER INFORMATION**

#### **REFERENCES**

- 1. The Essential oils by Gunther Volume V
- 2. Wealth Asia disk 2.2(Publication of CSIR, India)
- 3. Essential oils 1976- 1978 by Dr. Brain M Lawrence
- 4. Food Chemical codex
- 5. Source Book of Flavours by Gary Reineccius

USES: The oil is used as flavour ingredient.

Computer edited Certificate - valid without signature

UPDATED ON 01/01/2017



#### **TECHNICAL DATA SHEET**

**Product: Celery Seed Oil** 

CAS NO: 8015-90-5

FEMA NO: 2271 HS CODE: 3301 2946

#### **Description:**

Celery Seed Oil is obtained by the steam distillation of dried seeds of Apium Graveolens L

#### **Organoleptic characteristics:**

Pale yellow to brownish yellow free flowing clear liquid with a characteristic pleasant aroma of Indian Celery

| ANALYTICAL QUALITY      |                                      |                      |
|-------------------------|--------------------------------------|----------------------|
| Parameters              | Specifications                       | Test Method          |
| Specific gravity @ 25°C | 0.870 to 0.910                       | GLE/QC/108 (ref:FCC) |
| Refractive Index @ 20°C | 1.480 to 1.490                       | GLE/QC/107 (ref:FCC) |
| Optical Rotation        | +48 <sup>0</sup> to +78 <sup>0</sup> | GLE/QC/109 (ref:FCC) |
| Limonene (by GC)        | 70% - 80%                            | GLE/QC/112           |

| HEAVY METALS |                   |        |  |
|--------------|-------------------|--------|--|
| Arsenic      | Less than 3 ppm   | ICP-MS |  |
| Lead         | Less than 3 ppm   | ICP-MS |  |
| Cadmium      | Less than 1 ppm   | ICP-MS |  |
| Mercury      | Less than 0.1 ppm | ICP-MS |  |

#### Halal & Kosher:

Certified by Halal Certification Services India Pvt Ltd and Star-K Kosher (USA).

#### **Additives:**

No additives

#### **GMO Status:**

The product is free from Genetically Modified Organisms.

#### Flavouring Status according to US (21 CFR 101-22) and EC(1334/2008):

**Natural Flavouring Preparation** 

#### **Packaging**

18 kg/20 Kg/ 180 Kgs HDPE pails/barrels or as per customer requirement.

#### Storage:

Keep in full & tight containers away from direct heat and light at ambient temperature (24-25°c).

#### **Shelf Life:**

Not more than 3 years from the date of manufacture when stored under specified storage conditions.



### **Vegetarian & Vegan Suitability Statement**

PRODUCT NAME: Celery Seed

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