## **CERTIFICATE OF ANALYSIS**

PRODUCT LINALOOL

BATCH NUMBER 4547604

BEST BEFORE July 2027

TEST	UNIT	RESULTS
APPEARENCE		CLEAR MOBILE LIQUID
COLOR		COLORLESS TO PALE YELLOW
ODOR		FLORAL, WOODY NOTES, FRESH, HERBAL
<b>REFRACTIVE IND.20</b>		1.4620
DENSITY 25/25		0.859
OTHER		PEROXIDES. <1 meq/kg
GC ANALYSIS		PROFILE SIMILAR TO STANDARD
ASSAY	(% GC)	99.90

## REACH REGISTRATION NO.01-2119474016-42

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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 AN

EXAMINATION OF THE GOODS RECEIVED.

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

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

QUALITY CONTROL DPT.

05 October 2023

To whom it may concern

## ALLERGENS CERTIFICATE

Product : LINALOOL BASE

To our knowledge from the currently existing information in our files received from our suppliers, we certify that the above-mentioned product does not contain any of the following materials\* :

- Cereals containing gluten (i.e. wheat, rye barley, oats, spelt, kamut or their hybridised strains) and products thereof
- Crustaceans and products thereof - Eggs and products thereof
- Fish and products thereof
- Peanuts and products thereof
- Soybeans and products thereof
- Milk and products thereof (including lactose)

 Nuts (i.e. almonds (Amygdalus communis L.). hazelnuts (Corylus avellana), walnuts (Juglans regia), cashews (Anacardium occidentale), pecan nuts (Carya illinoiesis (Wangenh.) K. Koch), Brazil nuts (Bertholletia excelsa), pistachio nuts (Pistacia vera), macadamia nuts and Queensland nuts (Macadamia ternifolia) and products thereof
 Celery and products thereof

- Mustard and products thereof
- Sesame seeds and products thereof
- Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/L expressed as SO2
- Lupin and products thereof
- Molluscs and products thereof

\*According to Regulation (EU) 1169/2011 of 25 October 2011 on the provision of food information to consumers.

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 flavouring ingredient to identify and comply with all relevant legal requirements.

05 October 2023

## **CMR SUBSTANCES**

Product: LINALOOL BASF

This is to inform about the content of substances classified as CMR (carcinogenic, mutagenic or reprotoxic) in the above-mentioned material, according to the current versions of the UN Global Harmonised System (GHS) and the EU Regulation 1272/2008 (the "CLP Regulation").

Substance name	CAS	CMR classification	% w/w
None to be considered			

The list contains those substances at or above 0.1 % considered as CMR (cat. 1, 2 or 3 and additional categories), either self-classified or under a harmonized classification.

Please note that a given content of a CMR substance in the material does not necessarily trigger a CMR classification and that the threshold for such classification depends on the GHS national implementation.

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 relevant legal requirements.

30 September 2019

Flowchart of the Production Process

Product: LINALOOL

Raw material of mineral and/or petrochemical origin

Chemical Synthesis

Linalool

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



05 October 2023

Product: LINALOOL BASF

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 Regulations (EC) 1829/2003 and 1830/2003.

This material complies with article 9 of Regulation (EC) 834/2007 and article 11 of Regulation (EU) 2018/848 regarding the prohibition on the use of GMOs in organic production

The information indicated above conlesponds to our knowledge at the date of issue

10 November 2023

## IFRA CONFORMITY CERTIFICATE

## Product: LINALOOL BASF

We certify that the above-mentioned product is in compliance with the Standards of the International Fragrance Associaton (IFRA) up to and including the 51st Amendment to the IFRA Standards (published June 2023), provided it is used in the following categories at a maximum concentration level of <sup>(1)</sup>:

Category 1	Not restricted	(2)	Category 7A	Not restricted	
Category 2	Not restricted		Category 7B	Not restricted	
Category 3	Not restricted		Category 8	Not restricted	
Category 4	Not restricted		Category 9	Not restricted	
Category 5A	Not restricted		Category 10A	Not restricted	
Category 5B	Not restricted		Category 10B	Not restricted	
Category 5C	Not restricted		Category 11A	Not restricted	
Category 5D	Not restricted		Category 11B	Not restricted	
Category 6	Not restricted	(2)	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.
 (2)

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 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).

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

Contains the following substances restricted by IFRA standards:

#### GERANIOL

< 0.003%

and complies with the latest IFRA specification.

This certificate 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 assessment of all product constituents.

Version Date: 6 November 2023

#### SAFETY DATA SHEET Conforms to Regulation (EC) No. 1907/2006 (REACH)

## LINALOOL BASF

Revision date: 23-01-2023 Version: 4.0/CLP/EN Print Date: 05-10-2023 Page: 1/5

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

## 1.1. Identification of the substance/mixture

Trade name: Substance name: CAS Number: CE Number: REACH Registration number: LINALOOL BASF LINALOOL 78-70-6 201-134-4 01-2119474016-42

#### 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 Industrial Estate
	Fordingbridge
Telephone:	SP6 IPA
	01425 655 555
E-mail:	tecnical@madarcorporation.co.uk

#### 1.4. Emergency telephone number

NCEC (+44) 1865 407333 (24h) NCEC (+34) 91 114 2520 (24h) (ES) NCEC (+1) 202 464 2554 (24h) (USA, Canada)

## SECTION 2. HAZARDS IDENTIFICATION

## 2.1. Classification of the substance or mixture

Skin Irritant - Category 2 - H315 Eye Irritant - Category 2 - H319 Skin sensitizer - Category 1B - H317

## 2.2. Label Elements





Signal Word: Warning

#### Hazard statements:

H315 – Causes skin irritation. H317 – May cause an allergic skin reaction. H319 – Causes serious eye irritation.

#### **Precautionary statements:**

P261 – Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352+P333+P313 – IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338+P337+P313 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Con tinue rinsing. If eye irritation persists: Get medical advice/attention.
P362+P364 – Take off contaminated clothing and wash it before reuse.

#### Suplemental Hazard Information:

Contains LINALOOL. May produce an allergic reaction.

#### 2.3. Other hazards

Product not containing any component that meets the criteria for PBT or vPvB according to Regulation (EC) 1907/2006, Annex XIII. Product not containing any component identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.



### SAFETY DATA SHEET Conforms to Regulation (EC) No. 1907/2006 (REACH)

#### LINALOOL BASF

Revision date: 23-01-2023 Version: 4.0/CLP/EN

Print Date: 05-10-2023 Page: 2 / 5

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.1. Substances

Chemical name:	LINALOOL
CAS number:	78-70-6
EC number:	201-134-4

#### Hazardous constituents:

Chemical Name	% (w/w)	CAS No. EC No. Index No.	Classification according to Regulation 1272/2008	Specific Concentration Limit, M-factor, ATE, SVHC
LINALOOL	≥50	78-70-6 201-134-4	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1B - H317	ATE (oral): 2790 mg/kg

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

## 3.2. Mixtures

Not applicable.

## **SECTION 4. FIR ST-AID MEASURES**

## 4.1. Description of necessary first aid measures

Ingestion:	Rinse mouth with water.
	Obtain medical advice.
	Keep at rest. Do not induce vomiting.
Eye contact:	In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes and seek medical advice.
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 No information available.

## **SECTION 5. FIRE-FIGHTING MEASURES**

#### 5.1. Extinguishing Media

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

#### 5.2. Special hazards arising from the substance or mixture

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

## 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.

## **SECTION 6. ACCIDENTAL RELEASE 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.

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

## LINALOOL BASF

Revision date: 23-01-2023 Version: 4.0/CLP/EN Print Date: 05-10-2023 Page: 3 / 5

## 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 8 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).

#### 7.3. Specific end use(s)

No information available.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### 8.1. Control parameters

Components with occupational exposure limits: None known.

#### 8.2. Exposure controls

Appropriate engineering controls:	Measures should be taken to prevent materials from being splashed into the body.
	Provide adequate ventilation, according to the conditions of use. Use a mechanical exhaust if required.
Eye/Face protection:	Chemical safety goggles are recommended. Wash contaminated goggles before reuse.
Hand Protection:	Chemical-resistant gloves are recommended. Wash contaminated gloves before reuse.
Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
Respiratory Protection:	In case of insufficient ventilation, use suitable respiratory equipment.
Environmental exposure controls:	Emissions from ventilation or process equipment should be checked to ensure they comply with environmental protection legislation.
	In some cases, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

#### 9.1. Information on basic physical and chemical properties

Physical sate:	Liquid
Colour:	Conforms to
Odour:	standard Conforms
Melting point/freezing point:	ŧ <b>5</b> 7standard
Boiling point or initial boiling point and range (°C):	199 (1013 hPa)
Flammability:	Not determined
Lower and upper explosion limit:	Not determined
Flash point:	75 ℃
Auto-ignition temperature:	235°C
Decomposition temperature:	Not determined
pH:	Not determined
Kinematic viscosity:	Not determined
Solubility:	1:4 v/v ETHANOL 60° - 1,45g/L IN WATER/SOLUBLE IN ETHANOL. 1:4 v/v ETHANOL
Partition coefficient n-octanol/water (log value):	60° LOG POW 2,7 (25°C)
Vapour pressure:	0,1 mbar (20°C) 2 mbar (50°C)
Density and/or relative density:	0,861-0,865 g/mL (20°C) / 0,861-0,865
Relative vapour density:	(20°C) Not determined
Particle characteristics:	Not determined

#### SAFETY DATA SHEET Conforms to Regulation (EC) No. 1907/2006 (REACH)

## LINALOOL BASF

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## 9.2. Other information

## 9.2.1. Information with regard to phyical hazard classes:

No information avaliable. 9.2.2. Other safety characteristics:

No information avaliable

### 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 or 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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	Based on the data available, the criteria for classification are not met.
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	Based on the data available, the criteria for classification are not met.
Carcinogenicity	Based on the data available, the criteria for classification are not met.
Reproductive toxicity	Based on the data available, the criteria for classification are not met.
STOT-single exposure	Based on the data available, the criteria for classification are not met.
STOT-repeated exposure	Based on the data available, the criteria for classification are not met.
Aspiration hazard	Based on the data available, the criteria for classification are not met.

## 11.2. Information on other hazards

11.2.1. Endocrine disrupting properties:

Product not containing any component identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100. 11.2.2. Other information:

No information available

## SECTION 12? ECOLOGICAL INFORMATION

#### 12.1. Toxicity

Assessment:

Based on the data available, the criteria for classification are not met. **Experimental/calculated data:** No information available.

## 12.2. Persistence and degradability

The product is readily biodegradable Biodegradation : 60-70%. (OECD 301).

## 12.3. Bioaccumulative potential No

information available.

## 12.4. Soil mobility

No information available.

### 12.5. Results of PBT and vPvB assessment

Product not containing any component that meets the criteria for PBT or ŷPvB according to Regulation (EC) 1907/2006, Annex XIII.

## LINALOOL BASF

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## 12.6. Endocrine disrupting properties

Product not containing any component identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.

## 12.7. 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.

## **SECTION 14: TRANSPORT INFORMATION**

	ADR/RID/ADN	IMDG	IATA-ICAO
14.1. UN Number	Not classified as hazardous goods	Not classified as hazardous goods	Not classified as hazardous
14.2. UN Proper Shipping Name	Notapplicable	Not applicable	goods Not applicable
14.3. Transport Hazard Class(es)	Not applicable	Not applicable	Not applicable
14.4. Packing Group	Notapplicable	Not applicable	Not applicable
14.5. Environmental hazards	No	No	No
Additional information	•		

## 14.6 Special precautions for user

None known

#### 14.7. Maritime transport in bulk according to IMO instruments

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

A chemical safety assessment has been carried out for the subsance or mixture by the supplier

## SECTION 16: OTHER INFORMATION

## **SPECIFICATION SHEET**

VERSION 7,00 VERSIO	N DATE	19/09/22	PRINT DATE	05/10/23
PRODUCT APPLICATIONS IUPAC NAME SYNONYMS	3,7-DIMETHY	ASF naterial not intended for direct use. L-1,6-OCTADIEN-3-OL L-1,6-OCTADIEN-3-OL		
FORMULA MOLECULAR WEIGHT CAS	C10 H18 O 154,25 78-70-6		I	
EINECS	201-134-4			
FEMA TARIFF NUMBER	2635 2905220090			
FOOD GRADE CERTIFICATE REACH REGISTRATION NO.				
SPECIFICATIONS				
ASPECT AT 20°C	CLEA	AR MOBILE LIQUID		

COLOUR ODOUR TASTE DENSITY AT 20°C (g / mi) DENSITY 25/25 **REFRACTIVE INDEX nD20 REFRACTIVE INDEX nD25** OPTICAL ROTATION (°) BOILING POINT (°C) MELTING POINT (°C) FLASH POINT (°C) ASSAY (% GC) ACID VALUE (mg KOH/g) SOLUBILITY VAPOUR PRESSURE OTHER SOLUBILITIES

COLORLESS TO PALE YELLOW FLORAL, WOODY NOTES, FRESH, HERBAL 0,861 - 0,865 0,858 - 0,862 1,4600 - 1,4630 199 (1013 hPa) -57 75,00 > 99 1:4 v/v ETHANOL 60° - 1,45g/L IN WATER 0,3 mbar (20°C; 2 mbar (50°C)

OTHER TECHNICAL DATA

PEROXIDES < 15 meg/kg. INCI NAME: LINALOOL

SOLUBLE IN ETHANOL, 1:4 V/V ETHANOL 60°

## STABILITY AND STORAGE

KEEP IN TIGHTLY CLOSED CONTAINER IN A COOL AND DRY PLACE, PROTECTED FROM LIGHT. WHEN STORED FOR MORE THAN 24 MONTHS, QUALITY SHOULD BE CHECKED BEFORE USE. IT CONTAINS ALPHA-TOCOPHEROL (250 ppm)

WE BELIEVE THE ABOVE INFORMATION TO BE CORRECT BUT WE DO NOT PRESENT IT AS ALL INCLUSIVE AND AS SUCH SHOULD BE USED AS A GUIDE. IT IS THE SOLE RESPONSIBILITY OF THE RECEIVER OF OUR PRODUCT TO COMPLY WITH EXISTING REGULATIONS AND INSTRUCTIONS.

Sant Just Desvern, 05 October 2023

Product: LINALOOL BASF

This is to certify that, to the best of our knowledge, the above-mentioned material is suitable for the following 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.

In addition, we confirm that it complies with the requirements listed on the Criteria of the V-label: Regulations, that can be found in https://www.v-label.eu/regulations\_text

## Vegetarian

Does not contain any ingredient of animal origin (mammalian, poultry, fish, crustacean, mollusc) or dairy and egg products, including additives 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, crustacean, mollusc), including additives and processing aids. Dairy, egg and bee products (e.g. honey, bees wax) are acceptable.

'Animal' refers to the entire animal kingdom, i.e. vertebrates and multicellular invertebrates.

The information indicated above corresponds to our knowledge at the date of issue