

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product :	BETA-CARYOPHYLLENE NATURAL 98%
Chemical identification :	Caryophyllene
CAS :	87-44-5
EC Number :	201-746-1
Registration number (REACH) :	Not applicable according to article 2 Regulation 1907/2006
Index No. :	Not applicable

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

Relevant identified uses of the substance or mixture: Industrial uses. Formulation [mixing] of preparations..
Uses advised against: Other uses than those recommended.

1.3 Details of the supplier of the safety data sheet

Lluch Essence, SLU
C/ Lo Gaiter de Llobregat 160, 08820 El Prat de Llobregat, Barcelona (Spain - Spain)
regulatory@llucho.com
Phone Number: +34 93 379 38 49; Fax: +34 93 478 27 54.

1.4 Emergency telephone number

Tel. +34 933 793 849 (8:00 - 17:00 GMT/UTC +1)
Tel. +1 760 476 3961 Access Code: 335550 (available 24/7 - Verisk 3E)
More emergency telephones by region:
<http://old.llucho.com/Emergencytelephones.pdf>

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008

Sensitisation — Skin, Hazard Category 1B; H317
Aspiration hazard, Hazard Category 1; H304.

2.2 Label elements

EC Number: 201-746-1
Caryophyllene



Signal word: Danger

Hazard Statements:

H304: May be fatal if swallowed and enters airways.

H317: May cause an allergic skin reaction.

Precautionary Statements:

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

P280: Wear protective gloves.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331: Do NOT induce vomiting.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P501: Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards

Results of PBT and vPvB assessment

The product does not contain substances identified as PBT and/or vPvB in a concentration equal to or greater than 0,1 % (w/w).

Environmental endocrine disrupting properties.

The product does not contain substances identified as having environmental endocrine disrupting properties in a concentration equal to or greater than 0,1 % (w/w).

Human health endocrine disrupting properties.

The product does not contain substances identified as having human health endocrine disrupting properties in a concentration equal to or greater than 0,1 % (w/w).

SECTION 3: Composition/information on ingredients

3.1 Substances

Concentration range of the constituent (% weight/weight)	EC number / Registration number	CAS	Chemical name	Hazard Class and Category Code; Hazard statement codes
≥50% and ≤100	201-746-1 01-2120745237-53	87-44-5	Caryophyllene	Skin Sens. 1B;H317- Asp. Tox. 1;H304

The chemical identity of any impurity, stabilising additive, or individual constituent other than the main constituent:

Concentration (%)	CAS	EC Number	Chemical name	Hazard Class and Category Code; Hazard statement codes
<1,00	97-53-0	202-589-1	4-Allyl-2-methoxyphenol	Eye Irrit. 2;H319- Skin Sens. 1B;H317 ^[1]

[1] Constituent.

SECTION 4: First aid measures

4.1 Description of first aid measures

Consumption: If swallowed, rinse mouth with water. Seek medical advice immediately and show this container or label. Keep the person at rest. Do NOT induce vomiting.

Eye contact: Contact lenses should be removed. Hold eyelids open and flush with copious amounts of clean, fresh water and seek medical advice.

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

Skin contact: Remove contaminated clothing. Wash skin with mild soap and water, rinse abundantly. If symptoms persist, obtain medical attention.

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

May produce an allergic reaction (rash, urticaria).
 Aspiration hazard. May cause lung damage if swallowed (aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration).
 Read label before use. No additional information available.

4.3 Indication of any immediate medical attention and special treatment needed

Not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

Not applicable.

5.3 Advice for firefighters

In case of fire in the surrounding area, follow the recommendations below:
 1-Closed containers may build up pressure at elevated temperatures.
 2-Avoid inhalation of fumes or vapours. Use appropriate respiratory protection.
 3-Prevent run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate gloves to prevent skin exposure.
 Avoid breathing vapours. Use a suitable respiratory apparatus if necessary. Avoid contact with eyes and skin.
 Maintain adequate ventilation in the working area after spilling.

6.2 Environmental precautions

Avoid contaminating the environment via the sewers or water sources.

6.3 Methods and material for containment and cleaning up

Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-lime, sand, soda ash).
 Ventilate area and wash spill site after material pickup is complete.

Dispose of in accordance with current laws and regulations.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from food, drink and animal feedingstuffs. Do not smoke.
 Avoid contact with skin and eyes.
 Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Keep the product in its original container well sealed, in a dry and ventilated area, away from potential sources of ignition and protected from light. Store in accordance with local/national regulations and follow the warnings on the label.
 Keep away from incompatible substances (see section 10).

7.3 Specific end use(s)

.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Declaration of substances is not required.

Derived no-effect level (DNEL): No data available
 Predicted No Effect Concentration (PNEC): No data available

8.2 Exposure controls

Eye/Face protection: Chemical safety goggles are recommended. Wash contaminated goggles before reuse.
 Personal protection equipment: Appropriate personal protective equipment shall be worn in accordance with Regulation (EU) 2016/425.
 Respiratory Protection: Use personal breathing apparatus whenever deemed necessary.
 Skin Protection: Avoid contact with skin. Compatible chemical-resistant gloves are recommended. Rinse and remove gloves immediately after use. Wash hands with soap and water thoroughly after handling.
 Engineering Controls-Ventilation: The areas where the product is handled and stored should be adequately ventilated.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: LIQUID
 Colour: COLORLESS - PALE YELLOW
 Odour: WOODY, SPICY
 pH value: Not applicable. Low solubility product.
 Melting point: < -100 °C
 Boiling point: 262 °C
 Flammability (solid, gas): Not applicable
 Flash point: 105.5 °C
 Auto-ignition temperature: 215 °C
 Decomposition temperature: Not relevant for classification of this product.
 Vapour pressure: 0.060 hPa (20 °C)
 Vapour density: Not relevant for classification of this product.
 Density: 0.890 - 0.910 g/cm³ (25 °C)
 Water solubility: 0.088 mg/L (20 °C)
 Partition coefficient: n-octanol/water: 6.23 log Pow
 Viscosity: Not relevant for classification of this product.
 Kinematic viscosity: Not determined
 Lower explosive limit: Not applicable
 Upper explosive limit: Not applicable
 Particle size distribution D50: Not applicable

9.2 Other information

Evaporation rate: Not relevant for classification of this product.

Oxidising properties: Non oxidizing
 Explosive properties: Not explosive
 Additional information: Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity

Not available.

10.2 Chemical stability

Stable under normal operating conditions.

10.3 Possibility of hazardous reactions

Hazardous Polymerization: It does not undergo any dangerous reactions under normal conditions.

10.4 Conditions to avoid

Handle in accordance with good industrial hygiene and safety practice.

10.5 Incompatible materials

Oxidizing mineral acids, strong reducing agents, strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon monoxide and other unidentified organic compounds may be formed upon combustion.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

See also sections 2 and 3.

Always use the product with care when handling chemicals.

Acute toxicity:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
- Acute oral toxicity (LD50):	Not classified for acute toxicity based on available data.
- Acute dermal toxicity (LD50):	Not classified for acute toxicity based on available data.
- Acute Inhalation toxicity (LC50 Gas):	Not classified for acute toxicity based on available data.
- Acute Inhalation toxicity (LC50 Dusts and Mists):	Not classified for acute toxicity based on available data.
- Acute Inhalation toxicity (LC50 Vapours):	Not classified for acute toxicity based on available data.
Skin corrosion/irritation:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Serious eye damage/irritation:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Respiratory or skin sensitisation:	This substance meets the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Germ cell mutagenicity:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Carcinogenicity:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
- Carcinogenicity (Oral):	Not classified for Carcinogenicity based on available data.
- Carcinogenicity (Dermal):	Not classified for Carcinogenicity based on available data.
- Carcinogenicity (Inhalation):	Not classified for Carcinogenicity based on available data.
Reproductive toxicity:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
STOT-single exposure:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
STOT-repeated exposure:	This substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.
Aspiration toxicity:	This substance meets the criteria for classification in accordance with Regulation (EC) No 1272/2008.

11.2 Information on other hazards:

Endocrine disrupting properties.:

The product does not contain substances identified as having human health endocrine disrupting properties in a concentration equal to or greater than 0,1 % (w/w).

SECTION 12: Ecological information

12.1 Toxicity

Acute aquatic toxicity: Not classified for acute toxicity based on available data.

Chronic aquatic toxicity: Not classified for acute toxicity based on available data.

*See also sections 2 and 3.
 Always use the product with care when handling chemicals.*

12.2 Persistence and degradability:

64%, 21 days

12.3 Bioaccumulative potential:

Partition coefficient: n-octanol/water: 6.23 log Pow
 Bioaccumulative potential: Not determined

12.4 Mobility in soil:

Not available.

12.5 Results of PBT and vPvB assessment:

The product does not contain substances identified as PBT and/or vPvB in a concentration equal to or greater than 0,1 % (w/w).

12.6 Endocrine disrupting properties.:

The product does not contain substances identified as having environmental endocrine disrupting properties in a concentration equal to or greater than 0,1 % (w/w).

12.7 Other adverse effects:

Not available.
 Do not allow the material to enter streams, sewers or other waterways.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Container disposal: Do not reuse empty containers. Containers must be disposed of as hazardous waste.
 Disposal conditions: Dispose of in accordance with all state and local environmental regulations. This material and its container must be disposed of in a safe way.

SECTION 14: Transport information

International Carriage of Dangerous Goods by Road (ADR)

14.1 UN number or ID number: Not applicable
 14.2 UN proper shipping name: Not subject to ADR.
 14.3 Transport hazard class(es):
 Class: -
 Subclass:
 14.4 Packing group: -
 14.6 Special precautions for user
 Tunnel restriction code: -
 Label: -

Sea Transport (IMDG)

14.1 UN number or ID number: Not applicable
 14.2 UN proper shipping name: Not restricted.
 14.3 Transport hazard class(es)
 Class: -
 Subsidiary hazard: -
 14.4 Packing group: -
 14.5 Environmental hazards
 Marine Pollutant: No
 14.6 Special precautions for user
 IMDG-Code segregation group: -
 EmS:
 Label:
 14.7 Maritime transport in bulk according to

IMO instruments:

Not applicable

Air Transport (ICAO/IATA)

14.1 UN number or ID number: Not applicable
 14.2 UN proper shipping name: Not restricted.
 14.3 Transport hazard class(es)
 Class: -
 Subsidiary hazard: -
 14.4 Packing group: -
 14.6 Special precautions for user
 Passenger aircraft: ACCEPTED
 Cargo aircraft: ACCEPTED
 Label:

SECTION 15: Regulatory information

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

Substances of very high concern:

The product does not contain substances included in the Substances of Very High Concern list (> 0,1 % w/w).

Information relating to SEVESO:

According to the hazard stated in section 2.1, the product is not regulated by directive 2012/18/EU.

15.2 Chemical safety assessment

Not available.

SECTION 16: Other information

This material should only be used for industrial purposes.

Full text of classifications (in accordance with Regulation (EC) No 1272/2008):

Eye Irrit. 2; H319	Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1B; H317	Sensitisation — Skin, Hazard Category 1B
Asp. Tox. 1; H304	Aspiration hazard, Hazard Category 1

Key literature references and sources for data:

1. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
2. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
3. Occupational Exposure Limits by the INSHT (Spanish National Institute of Safety and Hygiene at Work).

Replaces version:16 (07/06/2023)

Reason for Change: Adjustment to Regulation (EU) 2020/878.

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and our company assumes no liability resulting from the use of this SDS. This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment and must determine suitability of this information for his application.