Ref no M-1629
Version: 11.2022

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

DICAPRYLYL CARBONATE

1. Identification of the substance/mixture and company

Trade name:	Dicaprylyl Carbonate
I.N.C.I.	Dicaprylyl Carbonate
Utilization:	Cosmetic ingredient
Supplier company identification:	Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania Tel/Fax: +40259-436.755, www.ellemental.com
Emergency:	RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București. International emergency number: +49 180 2273-112

2. Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

According to Regulation (EC) No 1272/2008 [CLP]
No need for classification according to GHS criteria for this product.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]
The product does not require a hazard warning label in accordance with GHS criteria.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]
No specific dangers known, if the regulations/notes for storage and handling are considered. Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

3. Declaration of ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature
Preparation based on: Dioctyl carbonate

4. First aid measures

4.1. Description of first aid measures

If adverse health effects develop seek medical attention.
If inhaled: not relevant.
On skin contact: After contact with skin, wash immediately with plenty of water.
On contact with eyes:
In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Seek

medical attention.
On ingestion: Rinse mouth and then drink 200-300 ml of water

4.2. Most important symptoms and effects, both acute and delayed
Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
Hazards: No hazard is expected under intended use and appropriate handling.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire fighting measures

5.1. Extinguishing media
Suitable extinguishing media:
water spray, carbon dioxide, dry powder, foam

5.2. Special hazards arising from the substance or mixture
Endangering substances: harmful vapours
Advice: Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters
Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective clothing.

6.2. Environmental precautions
Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up
For small amounts: Pick up with suitable absorbent material.
For large amounts: Dike spillage. Pump off product.
Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections
Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

DICAPRYLYL CARBONATE

7. Handling and storage

7.1. Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.
Protection against fire and explosion:
Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

7.2. Conditions for safe storage, including any incompatibilities
Suitable materials for containers: tinned carbon steel (Tinplate), glass, High density polyethylene (HDPE), Galvanized carbon steel (Zinc), Carbon steel (Iron)
Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.
Below temperature limit the product properties will change. The property change is reversible by stirring and heating. Protect against moisture. Please refer to the product specific data sheet for further information.

Storage stability:
Storage temperature: -10 - 30 °C
Protect against moisture.

Protect from temperatures below:-10 °C
Characteristics of the product are reversibly changed when falling below the limit temperature.
Protect from temperatures above:40 °C
Properties of the product change irreversibly on exceeding the limit temperature.

7.3. Specific end use(s)
For the relevant

8. Exposure controls / personal protection

8.1. Control parameters
Components with occupational exposure limits
No substance specific occupational exposure limits known.

8.2. Exposure controls
Appropriate engineering controls
No special precautions necessary.
Personal protective equipment
Respiratory protection:
Respiratory protection not required.

Hand protection:
Suitable are protective gloves with the following specification. The recommendation is valid for laboratory conditions, specific workplace conditions must be taken into consideration separately.
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):
nitrile rubber (NBR) - 0.2 mm coating thickness

Eye protection:

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

DICAPRYLYL CARBONATE

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures
Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

State of matter: liquid
Form: liquid
Colour: colourless
Odour: almost odourless
Odour threshold: not applicable
Pour point: <= -20,0 °C (DIN ISO 3016)
Melting temperature: < -20 °C
Boiling temperature: 331 °C(approx. 1.013 hPa) The substance / product does not decompose. (Directive 92/69/EEC, A.2)
Flammability: not flammable
Flammability of Aerosol Products: not applicable, the product does not form flammable aerosoles
Lower explosion limit:
For liquids not relevant for classification and labelling.
Upper explosion limit:
For liquids not relevant for classification and labelling.
Flash point: 189 °C (ISO 2719)
Auto-ignition temperature: not determined
Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.
pH value: not relevant
Viscosity, kinematic: not determined
Viscosity, dynamic: 6 - 8 mPa*s (20 °C) (DGF C-IV 7; Viscosity Höppler/Ubbelohde)
Solubility in water: insoluble
Solubility (qualitative) solvent(s): distilled water insoluble
Partitioning coefficient n-octanol/water (log Kow): not determined
Vapour pressure: 0,00021 mbar (20 °C) (Directive 92/69/EEC, A.4)
Density: 0,890 - 0,893 g/cm3 (20 °C) (DIN 51757)0,8688 g/cm3(50 °C)(DIN 51757)
Relative vapour density (air): not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosives
Explosion hazard: not explosive
Oxidizing properties

Fire promoting properties: not fire-propagating

Other safety characteristics
Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.
No further information available.

Evaporation rate:
Value can be approximated from Henry's Law Constant or vapor pressure.

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
Reacts with oxidizing agents. Reacts with bases. Reacts with strong acids.

10.4. Conditions to avoid
See SDS section 7 - Handling and storage.

10.5. Incompatible materials
Substances to avoid:
No substances known that should be avoided.

10.6. Hazardous decomposition products
Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

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

Acute toxicity
Assessment of acute toxicity:
Virtually nontoxic after a single ingestion.

Experimental/calculated data:
LD50 (oral): > 5.000 mg/kg (OECD Guideline 401)

Irritation
Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:

Material safety data sheet
According to EU Regulation 1907/2006 in the current version
DICAPRYLYL CARBONATE

Skin corrosion/irritation
rabbit: Slightly irritating. (OECD Guideline 404)

Serious eye damage/irritation
rabbit: Slightly irritating. (OECD Guideline 405)

Respiratory/Skin sensitization
Assessment of sensitization:
There is no evidence of a skin-sensitizing potential.

Germ cell mutagenicity
Assessment of mutagenicity:
The chemical structure does not suggest a specific alert for such an effect.

Experimental/calculated data:
Ames-test
Bacteria: negative (OECD Guideline 471)

Carcinogenicity
Assessment of carcinogenicity:
The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity
Assessment of reproduction toxicity:
The chemical structure does not suggest a specific alert for such an effect.

Developmental toxicity
Assessment of teratogenicity:
No data was available concerning toxicity to development.

Specific target organ toxicity (single exposure)
Assessment of STOT single:
Based on available data, the classification criteria are not met.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)
Assessment of repeated dose toxicity:
No adverse effects were observed after repeated exposure in animal studies.

Aspiration hazard
No aspiration hazard expected.

Interactive effects
No data available.

11.2. Information on other hazards

Endocrine disrupting properties
Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set

out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information
Other relevant toxicity information
The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

12. Ecological information

12.1. Toxicity
Assessment of aquatic toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish:
LC50 > 100 mg/l (DIN EN ISO 7346-2)

Aquatic invertebrates:
EC50 > 100 mg/l (OECD Guideline 202, part 1)

Aquatic plants:
EC50 > 100 mg/l (OECD Guideline 201)

Microorganisms/Effect on activated sludge:
EC0 > 10 - 100 mg/l (DIN 38412 Part 27 (draft))

12.2. Persistence and degradability
Assessment biodegradation and elimination (H2O):
Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential
Assessment bioaccumulation potential:
No data available.

12.4. Mobility in soil
Assessment transport between environmental compartments:
Volatility: not applicable

12.5. Results of PBT and vPvB assessment
According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

12.6. Endocrine disrupting properties
Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

DICAPRYLYL CARBONATE

12.7. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

13. Disposal considerations

13.1. Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:
Uncontaminated packaging can be re-used.
Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14..Transport information

Land transport

ADR
Not classified as a dangerous good under transport regulations
UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable S
pecial precautions for user None known

RID
Not classified as a dangerous good under transport regulations
UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user None known

Inland waterway transport

ADN
Not classified as a dangerous good under transport regulations
UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Transport in inland waterway vessel
Not evaluated

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

DICAPRYLYL CARBONATE

Sea transport

IMDG
Not classified as a dangerous good under transport regulations
UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user None known

Air transport

IATA/ICAO
Not classified as a dangerous good under transport regulations
UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user None known

14.1. UN number or ID number
See corresponding entries for “UN number or ID number” for the respective regulations in the tables above.

14.2. UN proper shipping name
See corresponding entries for “UN proper shipping name” for the respective regulations in the tables above.

14.3. Transport hazard class(es)
See corresponding entries for “Transport hazard class(es)” for the respective regulations in the tables above.

14.4. Packing group
See corresponding entries for “Packing group” for the respective regulations in the tables above.

14.5. Environmental hazards
See corresponding entries for “Environmental hazards” for the respective regulations in the tables above.

14.6. Special precautions for user
See corresponding entries for “Special precautions for user” for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments
Maritime transport in bulk is not intended.

15. Regulatory information

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

DICAPRYLYL CARBONATE

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

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
Listed in above regulation: no

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment
Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

16. Additional information

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:
Aquatic Chronic Hazardous to the aquatic environment - chronic
H412 Harmful to aquatic life with long lasting effects.

Abbreviations
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

Disclaimer:
This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.