

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

DECALACT

1. Identification of the substance/mixture and company

Trade name: Decalact

Multifunctional ingredient

INCI Sodium caproyl/Lauroyl lactylate, Triethyl citrate

CAS No.: 1312021-45-6; 77-93-0

Utilization: Raw material for cosmetic use, multifunctional

Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania

Tel/Fax: +40259-436.755, www.elemental.eu

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

According to Hazardous Product Regulations

2.1 Health Hazards

Skin sensitizer Category 1

Hazard Symbol:



Signal Word: Warning

Hazard Statement: May cause an allergic skin reaction.

According to present data no classification and labeling is required according to Reg. (EC) No 1272/2008. This product is not classified as hazardous to health or environment according to the CLP regulation.

2.2 Precautionary Statements

P233: Keep container tightly closed

P281: Use personal protective equipment as required

P402: Store in a dry place

P404: Store in a closed container

P410: Protect from sunlight

P411: Store at temperatures not exceeding 32°C

2.3 Other information

Clothing should not be allowed out of the workplace. Wear protective gloves.

Response: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

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

Other hazards: None known.

Results of PBT and vPvB assessment:

-PBT: Not applicable



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-vPvB: Not applicable

3. Declaration of ingredients

3.1 Substances: NR

3.2 Mixtures

| Material | CAS No. / EC No. | REACH Status | % |
|--|------------------|------------------------------|---------|
| INCI: Sodium Caproyl/Lauroyl Lactylate (Fatty acids, C10-12, esters with polylactic acid, sodium salts/Sodium Caproyl/Lauroyl Lactylate) | • | Reg. No. 01-2119957863-23 | 68 – 72 |
| Triethyl Citrate | , | Reg. No. 01-2119955435-32 | 28 – 32 |

4. First aid measures

4.1 Description of necessary first-aid measures

General information: Remove soiled or soaked clothing immediately.

Inhalation: Ensure supply of fresh air. In the event of symptoms seek medical advice.

Skin Contact: In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.

Eye contact: In case of contact with eyes rinse thoroughly with water. In the event of symptoms seek medical advice.

Ingestion: Thoroughly clean the mouth with water In the event of symptoms seek medical advice.

4.2 Personal Protection for First aid Responders:

Do not inhale explosion and/or combustion gases, Self-contained breathing apparatus.

4.3 Most important symptoms/effects, acute and delayed

Symptoms: Skin sensitizer Hazards: No data available.

4..4 Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.



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5. Fire fighting measures

5.1 Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray. Unsuitable extinguishing media: Full water jet.

Specific hazards arising from the chemical: In the event of fire the following can be released: - carbon dioxide, carbon monoxide Under certain conditions of combustion traces of other toxic substances cannot be excluded.

5.2 Special protective equipment and precautions for firefighters

Special fire fighting procedures: Keep away from sources of ignition Take action to prevent static discharges. Vapors may form explosive mixtures with air.

Special protective equipment for fire-fighters: Do not inhale explosion and/or combustion gases Self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
High risk of slipping due to leakage/spillage of product. Ensure adequate ventilation. Use personal protective equipment.

6.2 Methods and material for containment and cleaning up

Absorb with liquid-binding material, e.g.: sand diatomaceous earth. Dispose of absorbed material in accordance with the regulations.

6.3 Environmental Precautions: Do not discharge into the subsoil/soil. Do not allow to enter drains or waterways.

7. Handling and storage

7.1 Precautions for safe handling

Do not inhale gases/vapors/aerosols. Avoid contact with skin and eyes. Provide good ventilation of working area (local exhaust ventilation if necessary).

7.2 Conditions for safe storage, including any incompatibilities

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Protect from heat and direct sunlight Keep container tightly closed in a cool well-ventilated place; open and handle with care. Recommended storage temperature: Store in a dry place at temperatures not exceeding 32°C. Based on stability studies, the optimum storage temperature for maximization of shelf life is up to 25°C.

8. Exposure controls / personal protection



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8.1 Control Parameters
Occupational Exposure Limits
Observe national threshold limit values.

Biological Limit Values
Observe national threshold limit values.
Appropriate Engineering Controls
No data available.

8.2 Individual protection measures, such as personal protective equipment

General information: No data available.

Eye/face protection: Tightly fitting safety goggles.

8.3 Skin Protection

Hand Protection: Additional Information: The selected protective gloves have to satisfy the specifications of EU

Directive 89/686/EEC and the standard EN 374 derived from it.

Other: protective clothing

Respiratory Protection: in case of formation of vapors/aerosols: Short term: filter apparatus,

combination filter A-P2

Hygiene measures: Do not eat, drink or smoke when working. Wash hands before breaks and immediately after

handling the product. Remove soiled or soaked clothing immediately. Use barrier skin cream.

9. Physical and chemical properties

9.1 Appearance Physical state: liquid Form: viscous

Color: clear, yellow to brownish

Odor: Characteristic

Odor Threshold: not measured pH value 1% in water: 4.0-7.5
Freezing point: not measured
Boiling Point: not measured
Flash Point: not measured
Evaporation Rate: not measured
Flammability (solid, gas): not measured
Flammability Limit - Upper (%): not measured
Flammability Limit - Lower (%): not measured

Vapor pressure: < 0,01 mbar (20°C) Vapor density (air=1): not measured

Density: 1,00 g/cm3



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Relative density: not measured Solubility in Water: Dispersible Solubility (other): not measured

Partition coefficient (n-octanol/water): not measured

Autoignition Temperature: not measured Decomposition Temperature: 240 °C Kinematic viscosity: No data available. Dynamic viscosity: 12.000 mPa.s Explosive properties: Not applicable Oxidizing properties: Not applicable Dust Explosion Limit, Upper: not measured Dust Explosion Limit, Lower: not measured Minimum ignition temperature: No data available.

Metal Corrosion: No data available. Self Ignition Temperature: not measured

10. Stability and reactivity

10.1 Reactivity

Stable under ordinary conditions of use and storage. See section Possibility of hazardous reactions

10.2 Chemical Stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reactions

Reaction with strong acids and bases. Reaction with strong oxidants.

10.4 Conditions to avoid

To avoid thermal decomposition, do not overheat.

Incompatible Materials: Unknown. No dangerous reaction known with common products

10.5 Hazardous Decomposition Products

May be released in case of fire: carbon monoxide and carbon dioxide.

11. Toxicological information

11.1 Information on likely routes of exposure

Inhalation: If handled correctly, not a relevant route of exposure. Information on effects are given below.

Skin Contact: Relevant route of exposure. Information on effects are given below.



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Eye contact: Relevant route of exposure. Information on effects are given below.

Ingestion: If handled correctly, not a relevant route of exposure. Information on effects are given below.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

11.2 Information on toxicological effects

Acute toxicity

Oral Product: Acute toxicity estimate : > 5.000 mg/kg

Dermal Product: No data available.

Inhalation Product: No data available. Repeated dose toxicity Product: No data available.

Skin Corrosion/Irritation Product: No data available.

Serious Eye Damage/Eye Irritation Product: No data available.

Respiratory or Skin Sensitization Product: No data available.

Carcinogenicity Product: No data available.

Germ Cell Mutagenicity In vitro Product: No data available.

In vivo Product: No data available.

Reproductive toxicity Product: No data available.

Specific Target Organ Toxicity - Single Exposure Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure Product: No data available.

Aspiration Hazard Product: No data available.



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Other effects: May cause an allergic skin reaction.

12. Ecological information

12.1 Ecotoxicity

Acute hazards to the aquatic environment:

Fish Product: No data available.

Aquatic Invertebrates Product: No data available.

Chronic hazards to the aquatic environment:

Fish Product: No data available.

Aquatic Invertebrates Product: No data available.

Toxicity to Aquatic Plants Product: No data available.

Persistence and Degradability Biodegradation Product: No data available.

BOD/COD Ratio Product: No data available.

Bioaccumulative potential Bioconcentration Factor (BCF) Product: No data available.

Partition Coefficient n-octanol / water (log Kow) Product: Log Kow: not measured

Mobility in soil: No data available.

12.2 Known or predicted distribution to environmental compartments

- Fatty acids, C10-C12, esters with polylactic acid, sodium salts:

No data available.

12.3 Other adverse effects

The product is classified as slightly hazardous to waters (according to the German Regulation on the Classification of Substances Hazardous to Waters (WwSV). Do not allow to enter soil, waterways or waste water canal.

13. Disposal considerations

13.1 Disposal methods

Do not allow the product to be released into the Environment.

Destruction/Disposal: Dispose of in accordance with relevant local regulations



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13.2 Contaminated Packaging:

If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards. Take all necessary precautions when disposing of this product according to local regulations.

14. Transport information

14.1 International Regulations

UN Number: None UN Shipping Name: None

Transport Hazard Class: Not classified as dangerous for transport

Land (rail/road): Material is not restrictive for land transport and is not regulated by ADR/RID

Sea: Material is not restrictive for sea transport and is not regulated by IMO/IMDG Air: Material is not restrictive for air transport and is not regulated by ICAO/IATA

Marine Pollutant: No

Transport/Additional Information: Not regulated for US DOT Transport in non-bulk containers

This material is not dangerous or hazardous Special Precautions for User: None known

14.2 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information

Labeling EC regulations: This product does not need to be labeled in accordance with EC Directives or respective national laws

16. Additional information

16.1 Abbreviations:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Test-ing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regula-tion (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergen-cy Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration as-sociated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good La-boratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships car-rying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - Interna-tional Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International



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Maritime Organization; INCI: International Nomenclature of Cosmetic Ingredients; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test popula-tion; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - Interna-tional Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Ef-fect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic sub-stance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR -(Quanti-tative) Structure Activity Relationship; PNEC: Predicted No Effect Concentration; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Re-striction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT -Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; STE: Short-term exposure; STEL: Short Term Exposure limit; STOT: Specific Target Organ Toxicity; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

DECLARATION OF ALLERGENS

7th Amendment to Directive 76/768/EC, annex III, part I (2003/15/EC)

| I.N.C.I. | C.A.S. | % |
|-------------------------------|-----------|---|
| Alpha-Hexyl cinnamic aldehyde | 101-86-0 | - |
| Amyl cinnamic alcohol | 101-85-9 | - |
| Amyl cinnamic aldehyde | 122-40-7 | - |
| Anisyl alcohol | 105-13-5 | - |
| Benzyl salicylate | 118-58-1 | - |
| Benzyl benzoate | 120-51-4 | - |
| Benzyl cinnamate | 103-41-3 | - |
| Benzyl alcohol | 100-51-6 | - |
| Cinnamic alcohol | 104-54-1 | - |
| Cinnamic aldehyde | 104-55-2 | - |
| Citral | 5392-40-5 | - |
| Citronellol | 106-22-9 | - |
| Coumarin | 91-64-5 | - |



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| Eugenol | 97-53-0 | - |
|--|------------|---|
| Farnesol | 4602-84-0 | - |
| Geraniol | 106-24-1 | - |
| Hydroxycitronellal | 107-75-5 | - |
| Isoeugenol | 97-54-1 | - |
| alpha-Iso-methyl ionone | 127-51-5 | - |
| Limonene | 5989-27-5 | - |
| Linalool | 78-70-6 | - |
| Lyral | 31906-04-4 | - |
| Methyl heptine carbonate | 12/06/11 | - |
| Methyleugenol | 93-15-2 | - |
| Oakmoss absolute | 9000-50-4 | - |
| p-tert-Butyl-alpha- methylhydrocinnamic aldehyde | 80-54-6 | - |

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.