

MATERIAL SAFETY DATA SHEET

UNDECALACTONE GAMMA NATURAL, OPTICAL ACTIVE

1. Identification

- Chemical name 5-Heptyldihydro-2(3H)-Furanone; 4-Undecanolide
- Synonyms Peach Aldehyde; Undeca-1,4-Lactone
- Molecular Formula $C_{11}H_{20}O_2$
- Molecular Weight 184.28
- CAS No. 104-67-6
- FEMA No. 3091
- EINECS No. 203-225-4
- FDA 172.510
- CoE 179

2. Hazards identification


- **Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

- | | |
|---------------------------------------|------|
| Skin irritation (Category 2) | H316 |
| Chronic aquatic toxicity (Category 3) | H412 |

- **Label elements**

Labelling according Regulation (EC) No 1272/2008 [CLP]

- | | |
|--------------------------------|---|
| Pictogram |  |
| Signal word | Warning |
| Hazard statement(s) | |
| H316 | Causes mild skin irritation |
| H402 | Harmful to aquatic life |
| H412 | Harmful to aquatic life with long-lasting effects |
| Precautionary statement(s) | |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P273 | Avoid release to the environment. |
| P501 | Dispose of contents/container to an approved waste disposal plant |
| Supplemental Hazard Statements | none |
| • Other hazards | none |

3. Composition/information on ingredients

- Gamma Undecalactone $\geq 98\%$

4. First aid measures

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- **Eye contact:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
 - **Skin contact:**
Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
 - **Inhalation:**
Remove from exposure and move to fresh air immediately. Get medical aid.
 - **After ingestion:**
Get medical aid. Wash mouth out with water.
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5. Fire-fighting measures

- **General Information:**
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
 - **Extinguishing Media:**
Use water spray, dry chemical, carbon dioxide, or chemical foam.
 - **Special method of fire-fighting**
Cool endangered containers with water spray; Containers may explode when heated.
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6. Accidental release measures

- **General Information:**
Use proper personal protective equipment as indicated in Section 8.
 - **Spills/Leaks:**
Vacuum or sweep up material and place into a suitable disposal container.
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7. Handling and storage

- **Handling:**
Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
 - **Storage:**
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.
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8. Exposure controls and personal protection

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- Technical measures Local exhaust ventilation necessary
 Take precautionary measures against electrostatic charging
 Processing in closed systems, if possible superposed by inert gas (e.g. nitrogen).
- Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower..
- Respiratory protection In case of olfactory nuisance: respirator with independent air supply or mask with activated charcoal filter
- Eyes: Safety glasses
- Hand Protective gloves
- Skin: Wear appropriate protective clothing to prevent skin exposure

9. *Physical and chemical properties:*

- Form Liquid
- Color Colorless to slight yellow
- Odor Fruity, peach
- pH value at 10g/l H₂O N/A
- Boiling point 164 - 166 °C at 17 hPa - lit.
- Flash point 112 °C closed cup
- Melting point N/A
- Explosive properties N/A
- Lower explosion limit N/A
- Upper explosion limit N/A
- Ignition temperature N/A
- Oxidizing properties N/A
- Vapor pressure N/A
- Specific gravity @25°C 0.942 – 0.945
- Solubility in water Insoluble
- Organic solvents 1 ml soluble in 5 ml 60% alcohol

10. *Stability and reactivity*

- Chemical Stability Stable at room temperature in closed containers under normal storage and handling conditions.
- Conditions to Avoid Ignition sources, excess heat, freezing temperatures, confined
- Substances to be avoided Metals, strong oxidizing agents, strong bases.
- Hazardous decomposition Carbon dioxide, carbon monoxide.
- Hazardous Will not occur.

11. *Toxicological information*

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- Acute toxicity LD50 - Oral - rat- 18500 mg/kg
LD50 Dermal - Rat - male and female - > 2,000 mg/kg
- Sensitization No information available.
- Mutagenicity No information available.
- Other Studies See actual entry in RTECS for complete information.

12. Ecological information

- No information available

13. Disposal considerations

- Waste from residues Observe local/national regulations regarding waste disposal
Incinerate in qualified installation with flue gas scrubbing

14. Transport information

- **UN number**
ADR/RID:- IMDG:- IATA:-
- **Shipping Name**
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
- **Hazard Class**
ADR/RID:- IMDG:- IATA:-
- **Packing Group**
ADR/RID:- IMDG:- IATA:-

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
no data available
- **Chemical Safety Assessment**
no data available

16. Other information

- Document Number B-N30911-08
- Creation Date Apr. 29, 19
- Revision 8.0

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- Disclaimer

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

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