1. Product and Company Identification

Product name: Nerolidol
Product code: 04 1089 6
Company information:
Manufacturer: DSM Nutritional Products AG
Wurmisweg 576
CH-4303 Kaiseraugst
Switzerland
Phone: +41-62 866 23 14
Fax: +41-62 866 25 10

2. Composition/Information on ingredients

Characterization: mixture of isomers; fragrance and chemical raw material
Chemical name:
- 3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol
Synonyms:
- 3-Hydroxy-3,7,11-trimethyl-1,6,10-dodecantrien
- Nerolidol techn. (Product code 0410896)
- Nerolidol (Product code 5000394)
CAS number: 7212-44-4
EINECS number: 230 597 5
Ro number: Ro 02-8731/000
Empirical formula: C_{15}H_{26}O
Molecular mass: 222.37 g/mol

3. Hazards identification

Most important hazards:
- No particular hazards known.
### 4. First-aid measures

<table>
<thead>
<tr>
<th>Chemical Exposure</th>
<th>First-aid Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>- Rinse immediately with tap water for 10 minutes - Open eyelids forcibly</td>
</tr>
<tr>
<td>Skin contact</td>
<td>- Remove immediately contaminated clothes, wash affected skin with water and soap - Do not use any solvents</td>
</tr>
<tr>
<td>Inhalation</td>
<td>- Remove the casualty to fresh air and keep him/her calm - In the event of symptoms get medical treatment</td>
</tr>
<tr>
<td>Note to physician</td>
<td>- Treat symptomatically</td>
</tr>
</tbody>
</table>

### 5. Fire-fighting measures

<table>
<thead>
<tr>
<th>Extinguishing Media</th>
<th>Suitable Extinguishing Media</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foam, powder, carbon dioxide, adapt extinguishing media to surrounding fire conditions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extinguishing Media</th>
<th>Unsuitable Extinguishing Media</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Use water spray for cooling purposes only (fat explosion hazard)</td>
</tr>
</tbody>
</table>

**Specific hazards**
- Material is combustible

### 6. Accidental release measures

<table>
<thead>
<tr>
<th>Personal Precautions</th>
<th>- Ensure adequate ventilation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for cleaning up</td>
<td>- Collect spills with inert adsorbent and hand over to waste removal</td>
</tr>
</tbody>
</table>

### 7. Handling and storage

#### Handling

**Technical measures**
- Processing in closed systems, superposed by inert gas (e.g. nitrogen)
- Take precautionary measures against electrostatic charging
- Provide exhaust ventilation

**Suitable materials**
- Glass, enamel, stainless steel, tin, zinc

**Unsuitable materials**
- Aluminium

#### Storage

**Storage conditions**
- Store under inert gas
- Protected from light
- Protected from humidity

**Packaging materials**
- Tightly closing; material: coated steel (protective lacquer)
8. Exposure controls/Personal protection

Engineering Measures  - see 7.

Personal protective equipment

Respiratory protection  - in case of olfactory nuisance: respirator with independent air supply or mask with activated charcoal filter

Hand protection  - protective gloves (eg made of NBR Acrylnitril-Butadien-Rubber)

Eye protection  - safety glasses

9. Physical and chemical properties

Colour  colourless to yellowish

Form  liquid

Odour  similar to citrus

Density  0.88 g/cm³ (20 °C)

Viscosity  0.01112 kg/m²s (20 °C)
            0.000009 kg/m²s (267.9 °C)

Refraction index  nD  1.480

Solubility  insoluble, water
            soluble, organic solvents
            soluble, ethanol

Partition coefficient  log P ow  4.7 (octanol/water°C)

Melting temperature  -75 °C

Boiling temperature  122 °C (4 mbar)
            145 °C (16 mbar)
            276 °C (1000 mbar)

Flash point (liquid)  96 °C

Ignition point (liquid)  240 °C

10. Stability and reactivity

Stability  - stable under the conditions mentioned in chapter 7

Conditions to avoid  - light
            - air

Materials to avoid  - acids, oxidizing agents
## 11. Toxicological information

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>$\text{LD}_{50}$</th>
<th>mg/kg</th>
<th>(route)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$&gt; 8'000$</td>
<td></td>
<td>oral, mouse</td>
</tr>
<tr>
<td></td>
<td>$&gt; 5'000$</td>
<td></td>
<td>dermal, rabbit</td>
</tr>
<tr>
<td></td>
<td>$&gt; 5'000$</td>
<td></td>
<td>oral, rat</td>
</tr>
</tbody>
</table>

- **Local effects**: skin: non-irritant (rabbit)
- **Sensitization**: non-sensitizing (guinea pig)
- **Note**: food additive, dosage: $\leq 6$ ppm

## 12. Ecological information

- **Ready biodegradability**: readily biodegradable
  - 87%, 28 days
  - (MITI Test I, OECD No. 301 C)
- **Air pollution**: observe local/national regulations

## 13. Disposal considerations

- **Waste from residues**: observe local/national regulations regarding waste disposal
- incinerate in qualified installation with flue gas scrubbing

## 14. Transport information

- **Note**: not classified by transport regulations

## 15. Regulatory information

- **Note**: no classification and labelling according to EU directives
- **Water hazard class (Germany)**: 2: hazardous for water (approved classification according to directive VwVwS of 17.05.1999)
## 16. Other information

### Use
- additive for use in food and pharmaceuticals
- fragrance
- chemical raw material

### Safety-lab number
- BS-5298
- BS-5740

### Edition documentation
- changes from previous version in sections 2, 4, 8, 11, 15

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**Important Notice**

DSM N.V., headquartered in Heerlen, The Netherlands, has acquired the vitamins, carotenoids, enzymes, food and feed ingredients, cosmetics ingredients and fine chemicals business (VFC Business) of the Roche group of companies, headquartered in Basel, Switzerland. Within the United States, DSM Nutritional Products, Inc. has purchased certain assets and assumed certain liabilities of the VFC Business formally conducted by Roche Vitamins Inc. Please note that corporate names, trade names, trade and service marks and domain names containing the word "Roche" and the "Roche" logo will continue to appear on our business documentation during our transition. We appreciate your understanding and cooperation as we complete our rebranding program. Should you have any questions, or if DSM can be of further assistance to you, please do not hesitate to contact your Account Manager or our Account Management Center at: +41-62 866 23 14.