**Typical Physical Properties**

- **Flash Point °C**: 92 °C
- **[α]D³** minimum: -51.0° to -48.0°
- **GC**: 99.9% min. as n-Menthol
- **Appearance**: White tablet or flakes
- **CAS No.**: 89-78-1 / 2216-51-5
- **M.W.**: 156.27
- **FEMA / GRAS No.**: 2665
- **Food Grade Cert.**: YES
- **CLogP**: 3.38
- **Vapor Pressure**: 1.020 Pa at 25°C

**Occurrence in Nature**

Found in oil of peppermint, Japanese mint and in minor quantities in oil of geranium.

**Application Information**

Used in perfumery to give power, lift, and freshness. Widely used in flavors, cosmetics, pharmaceutical dentifrices and tobacco flavors.

**Chemical Structure**

(1R,2S,5R)-2-Isopropyl-5-methylcyclohexanol

Chemical formula - C₁₀H₂₀O

**Synonym**

(1R,2S,5R)-(−)-Menthol

**Tenacity on Blotter**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Days</th>
<th>Weeks</th>
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<tbody>
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</tbody>
</table>

**Bloom Diffusivity**

- **Poor**
- **Fair**
- **Good**
- **Very**

**Stability**

<table>
<thead>
<tr>
<th>Hypochlorite bleach</th>
<th>Perborate Powder Detergent</th>
<th>Perborate Powder Detergent</th>
</tr>
</thead>
<tbody>
<tr>
<td>POOR</td>
<td>FAIR</td>
<td>GOOD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liquid Detergent</th>
<th>Concentrated Fabric Softeners</th>
<th>Soaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>POOR</td>
<td>FAIR</td>
<td>GOOD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alcoholic fine fragrances</th>
<th>Toiletry Applications</th>
<th>Antiperspirants</th>
</tr>
</thead>
<tbody>
<tr>
<td>POOR</td>
<td>FAIR</td>
<td>GOOD</td>
</tr>
</tbody>
</table>

**Substantivity**

<table>
<thead>
<tr>
<th>Skin</th>
<th>Dry Fabric</th>
<th>Wet Fabric</th>
<th>Hair</th>
</tr>
</thead>
<tbody>
<tr>
<td>POOR</td>
<td>FAIR</td>
<td>FAIR</td>
<td>GOOD</td>
</tr>
</tbody>
</table>

**Properties**

- **Food Grade Cert.**: YES
- **Olfactory Reference**: Herbs, herbal, menthol, mint, sweet, medicinal
- **Odor Type**: Mint
- **Odor Notes**: Mint, herbal, medicinal, sweet, fresh, natural, punch, strength

**Odor Intensity**: Moderate

**Odor Tenacity**: Excellent

**Odor Stability**: Good

**Odor Life**: Long

**Odor Availability**: Year-round

**Odor Base Notes**: Base, neutral, floral, herbaceous, herbal, woody

**Odor Compatibility**: Well-balanced, floral, herbal, sweet, fresh, minty, punchy, aromatic, powdery, sweet, floral, elegant, complex

**Odor Usage**: Perfumery, flavors, pharmaceuticals, cosmetics, tobacco flavors, detergents, soaps, alcoholic fine fragrances, toiletries, antiperspirants, skin care products, dry fabric care, wet fabric care, hair care products.