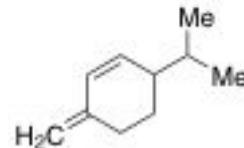


CERTIFICATE OF ANALYSIS

1. Identification

| | | |
|--|---|---|
| <u>Catalogue Number</u> | <u>Lot Number</u> | <u>Structure</u> |
| TRC-P294560 | 1-NOS-107-3 |  |
| <u>Product Name</u> | <u></u> | <u></u> |
| <p>β-Phellandrene</p> | | |
| <u>Synonyms</u> | <u></u> | <u></u> |
| <p>3-Methylene-6-(1-methylethyl)cyclohexene; p-Mentha-1(7),2-diene; (±)-β-Phellandrene; 3-Isopropyl-6-methylene-1-cyclohexene; 4-Isopropyl-1-methylene-2-cyclohexene; NSC 53044; beta-Phellandrene</p> | | |
| <u>CAS Number</u> | <u>Solubility</u> | <u>Shipping Condition</u> |
| 555-10-2 | Chloroform (Sparingly), Methanol (Slightly) | This Product Is Stable To Be Shipped At Room Temperature |
| <u>Molecular Formula</u> | <u>Source of Product</u> | <u>Long Term Storage Conditions</u> |
| C ₁₀ H ₁₆ | Synthetic | 4°C, Inert atmosphere, Light sensitive |
| <u>Molecular Weight</u> | <u>Purity</u> | <u></u> |
| 136.24 | 96% | |

2. Warnings

Light Sensitive

3. Analytical Information

| <u>Tests</u> | <u>Specifications</u> | <u>Results</u> |
|-------------------|-----------------------|-----------------------------|
| Appearance | Colourless Oil | Colourless Oil |
| NMR | Conforms to Structure | Conforms |
| C NMR | Conforms to Structure | Conforms |
| HPLC Purity | >95% | 100.00% (235 nm) |
| MS | Conforms to Structure | Conforms |
| Specific Rotation | Report Result | -0.1° (c = 1.0, Chloroform) |

Additional Information

N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed.

The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

| <u>Reviewed by</u> | <u>Reviewed by</u> | <u>C of A Approved by</u> | <u>Test Date</u> | <u>Retest Date</u> |
|---|--|---|------------------|--------------------|
|  Neha Khanna Product Quality Specialist |  Toni Rantanen Manager, Quality Assurance |  Chanell Chu Jr. Quality Assurance | 8/24/2021 | 8/22/2025 |