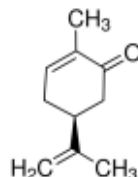


## Certificate of Analysis

Product Name:

**(+)-Carvone - analytical standard**

**Product Number:** 22070  
**Batch Number:** BCCK1092  
**Brand:** SIAL  
**CAS Number:** 2244-16-8  
**Formula:** C<sub>10</sub>H<sub>14</sub>O  
**Formula Weight:** 150,22 g/mol  
**Quality Release Date:** 01 MAR 2023  
**Expiration Date:** FEB 2026



Test	Specification	Result
Appearance (Color)	Colorless to Light Green-Yellow to Light Yellow	Colorless
Appearance (Form)	Liquid	Liquid
Purity (GC)	≥ 98.5 %	99.4 %
Specific Rotation (20/D) Neat	59.0 - 63.0 deg	59.5 deg
1H NMR Spectrum	Conforms to Structure	Conforms

Dr. Reinhold Schwenninger  
Quality Assurance  
Buchs, Switzerland CH

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at [Sigma-Aldrich.com](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

