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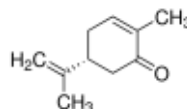
Outside USA: eurtechserv@sial.com

## Certificate of Analysis

Product Name:

L-Carvone - natural, 99%, FG

**Product Number:** W224908  
**Batch Number:** MKCC4285  
**Brand:** ALDRICH  
**CAS Number:** 6485-40-1  
**Formula:** C<sub>10</sub>H<sub>14</sub>O  
**Formula Weight:** 150.22 g/mol  
**Quality Release Date:** 02 FEB 2017  
**Expiration Date:** JAN 2022



Test	Specification	Result
Appearance (Color)	Colorless to Light Yellow	Colorless
Appearance (Form)	Liquid	Liquid
Refractive index at 20 °C	1.495 - 1.502	1.499
Infrared Spectrum	Complete	Conforms
Angular Rotation	-62.0 - -57.0 °	-58.5 °
Purity (GC)	≥ 98.5 %	99.3 %
Arsenic (As)	≤ 3 ppm	< 1 ppm
Mercury (Hg)	≤ 1 ppm	< 1 ppm
Cadmium (Cd)	≤ 1 ppm	< 1 ppm
Lead (Pb)	≤ 10 ppm	< 1 ppm
Kosher Status	Confirmed	Conforms
Expiration Date Period	-----	-----
60 Months		

Michael Grady, Manager  
Quality Control  
Milwaukee, WI US

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. 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.