



Version	00
Molecular weight	150.22
Quality Test / Release Date	12/20/2018
Molecular Formula	C ₁₀ H ₁₄ O
CAS No	2244-16-8
Linear Formula	
Flash Point (°C)	97

Certificate of Analysis

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Unless otherwise stated, these products are not intended for dialysis, parenteral, or injectable use without further processing. The following are the actual analytical results obtained:

Catalog Number	15068	Quality Test / Release Date 12/20/2018
Lot Number	A0403823	
Description	D(+)-Carvone, 96%, natural	
Country of Origin	GERMANY	
Declaration of Origin	plant	

BSE/TSE comment	
------------------------	--

Chemical Comment	
-------------------------	--

Result name	Units	Specifications	Test Value
Appearance (Color)		Clear colorless to light yellow	Clear light yellow
Appearance (Form)		Liquid	Liquid
Appearance		May darken on storage	May darken on storage
Infrared spectrum		Conforms	Conforms
GC		≥95 %	97.4 %
Refractive index		1.4960 to 1.5010 (20°C, 589 nm)	1.4978 (20°C, 589 nm)
Specific gravity		(25°C) 0.953 to 0.962	(25°C) 0.96
Specific optical rotation		+52.0° to +62.0° (20°C, 589 nm) (neat)	+56.1° (20°C, 589 nm) (neat)



A handwritten signature in black ink, appearing to read "L. Van den Broek".

L. Van den Broek, QA Manager

Issued: 12-21-2018

Acros Organics
 ENA23, zone1, nr 1350, Janssen Pharmaceuticaalaa 3a, B-2440 Geel, Belgium
 Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: <http://www.acros.com>
 1 Regent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329