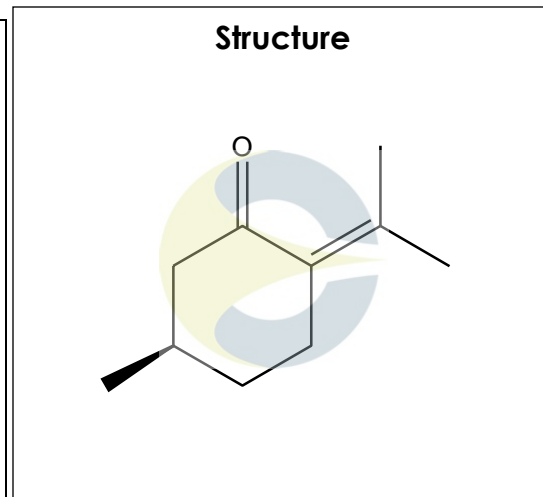


Certificate of Analysis
For Laboratory Use Only

PRODUCT NAME	R-(+)-Pulegone
PART NUMBER	00016405
STANDARD TYPE	Analytical Standard (AS)
LOT NUMBER	00016405-363
REPORT NUMBER	CDXA-RSS-4550-02
SAMPLE NUMBER	CDXA-11-3553
DATE OF SAMPLE	06/08/2011
DATE OF RE-EVALUATION	08/04/2015 (1 st); 04/01/2020 (2 nd)
DATE OF REPORT	05/07/2020



CHEMICAL NAMES	(5R)-5-Methyl-2-(1-methylethylidene)-cyclohexanone; d-Pulegone
CHEMICAL FORMULA	C ₁₀ H ₁₆ O
MOLECULAR WEIGHT (MW)	152.23
CHEMICAL FAMILY	Monoterpenes
CAS NUMBER	[89-82-7]
EC#(EINECS)	201-943-2
RTECS	OT0261000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
GC	0.700.10.2.METH140	NA	97.0%
Mass Spectrum	0.700.10.2.METH140	Conforms	Conforms
Appearance	NA	NA	Light Yellow Oil

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	04/2025 under the above conditions.

This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

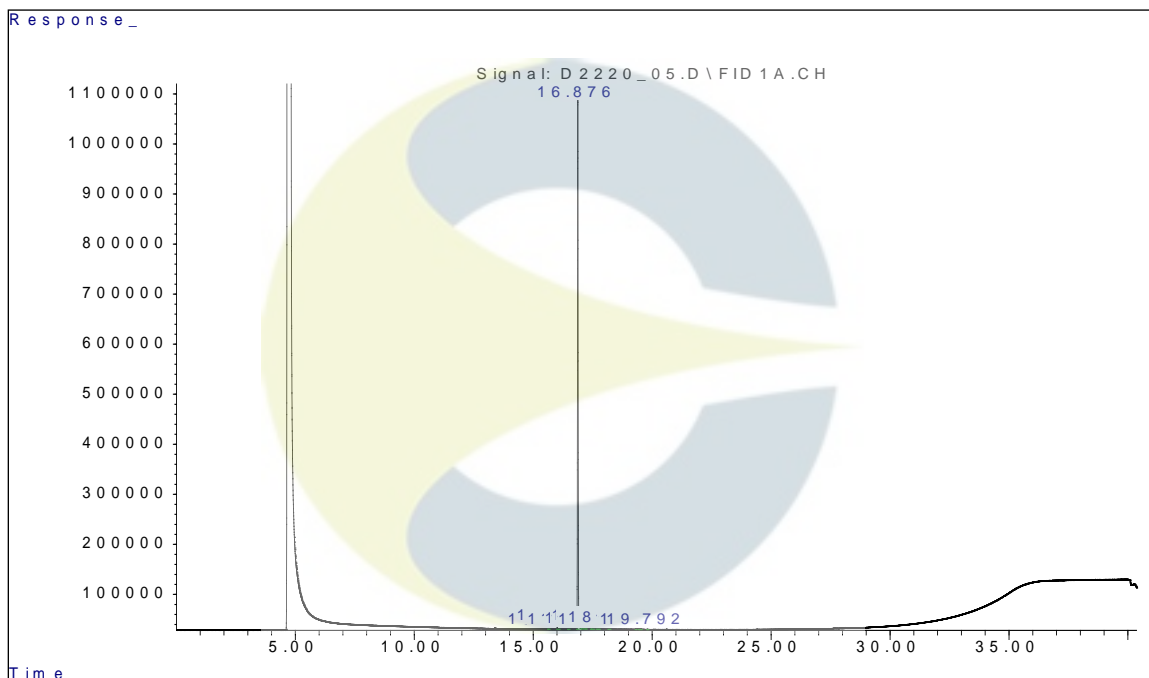
Certificate of Analysis

For Laboratory Use Only

ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 6890N WITH FLAME IONIZATION DETECTOR (FID) AND AGILENT 5973N MASS SELECTIVE DETECTOR (MSD)
COLUMN	Phenomenex Zebron ZB-5HT Inferno, 30 m x 0.32 mm x 0.25 µm; connected to an MXT Y-union, connected to a Restek Siltek deactivated guard column: 10 m x 0.25 mm to FID; and a 5 m x 100 µm transfer line to MSD.
CARRIER GAS	Helium
COLUMN TEMP.	Isothermic 40 °C for 5.0 minutes, then increasing at 10.0 °C/minute to 340 °C. Hold at 340 °C for 5.0 minutes.
FLOW RATE	2.0 mL/minute
INJECTOR TEMP.	300 °C
INJECTOR SPLIT RATIO	20:1
INJECTION VOL.	1.0 µL
INJECTION CONC.	1.8 mg/mL in Methanol
DETECTION	FID (350 °C) & MSD (Transfer line 300 °C, Source 250 °C, Quad 200 °C)

GC CHROMATOGRAM OF R-(+)-PULEGONE (CDXA-11-3553)

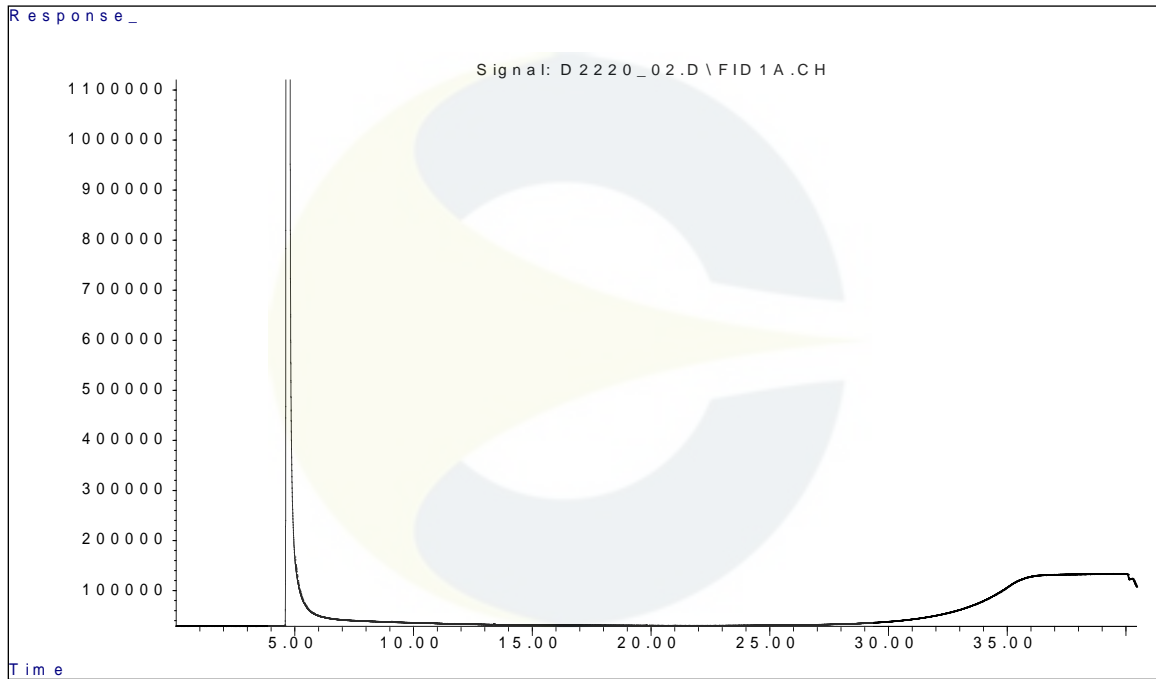


This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

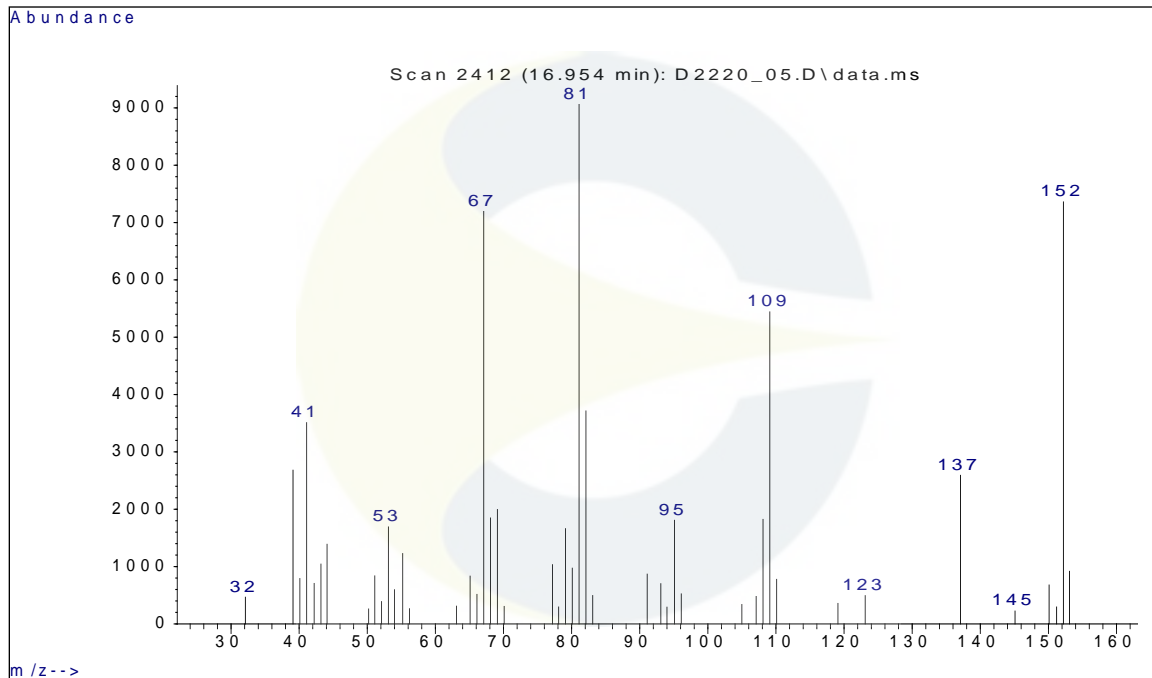
Certificate of Analysis

For Laboratory Use Only

GC CHROMATOGRAM OF DILUENT BLANK



MASS SPECTRUM OF R-(+)-PULEGONE (CDXA-11-3553)



This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

Certificate of Analysis

For Laboratory Use Only

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	07/26/2011	New report
01	08/24/2015	Passed re-evaluation by GC/FID. Updated expiration date and standard type.
02	05/07/2020	Passed second re-evaluation by GC/FID, MS. Updated expiration date, analytical method, conditions, chromatograms and results. Removed melting point.

This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

10005 MUIRLANDS BLVD., SUITE G, IRVINE, CA 92618 | T: +1 [949-419-0288](tel:949-419-0288) | F: +1 949-419-0294 | WWW.CHROMADDEX.COM
LABORATORY ADDRESS: 1751 S. FORDHAM ST., SUITE 350, LONGMONT, CO 80503

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com