Chem-Impex International, Inc.

Tel: (630) 766-2112 E-mail: sales@chemimpex.com Shipping and Correspondence: 935 Dillon Drive Wood Dale, IL 60191 Fax: (630) 766-2218 Web site: www.chemimpex.com Manufacturing site: 825 Dillon Drive Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	37025
Lot Number	003135-200403
Product	L-Menthol
	(-)- <i>p</i> -Menthan-3-ol
CAS Number	2216-51-5
Molecular Formula	$C_{10}H_{20}O$
Molecular Weight	156.27
Appearance	Prismatic or acicular shiny large crystals
Odor	Pleasant and characteristic
Melting Point	43 °C
Optical Rotation	$[a]_D^{20} = -49.35 \circ (L-Menthol)$ $[a]_D^{20} = -0.09 \circ (DL-Menthol)$
Oxidizable Substances	Readily oxidizable substance in DL-Menthol : Purpule coloration of KMnO4 solution should persist for 6 minutes.
Non-Volatile Matter	< 0.05%
Related Substances	Individual impurities : 0.18% Total impurities : 0.53%
Purity by GC	99.47%
Grade	USP
Storage	Store at RT
Additional Information	Identication A, B : Passes test Congealing range of DL-Menthol : DL-Menthol should congeal at temperature between 27 - 28 °C. After addition of few mg of dried DL- Menthol to the congealed mass, the temperature should rise to 30.5 to 32.0 °C.

Certificate of Analysis

Catalog Number: 37025

Lot Number: 003135-200403

Remarks

See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

likumer.

Bala Kumar Quality Control Manager