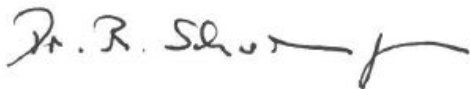


Certificate of Analysis

Product Name: (1*R*)-(-)-Menthyl acetate
98 %
Product Number: 441058
Batch Number: BCCB7395
Brand: Aldrich
CAS Number: 2623-23-6
Formula: C₁₂H₂₂O₂
Formula Weight: 198.30
Quality Release Date: 28 JUN 2019

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	COLORLESS	COLORLESS
APPEARANCE (FORM)	LIQUID	LIQUID
PURITY (GC AREA %)	≥ 97.5 %	100.0 %
ENANTIOMERIC EXCESS	= 97.5 %	99.0 % (GC)
SPECIFIC ROTATION (20/D)	-81.0 - -77.0 DEGREES	-79.6 DEGREES
CONCENTRATION	C=NEAT	C=NEAT
PROTON NMR SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS



Dr. Reinhold Schwenninger
Quality Assurance
Buchs, Switzerland

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.