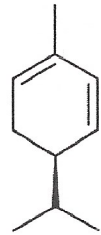




INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30
Hillsborough, NJ 08844 USA
Phone: (908) 359-6778; Fax: (908) 359-1179



Certificate Of Analysis

025411S**R-(-)- α -PHELLANDRENE****Lot No.: 20072023****IDENTIFICATION**

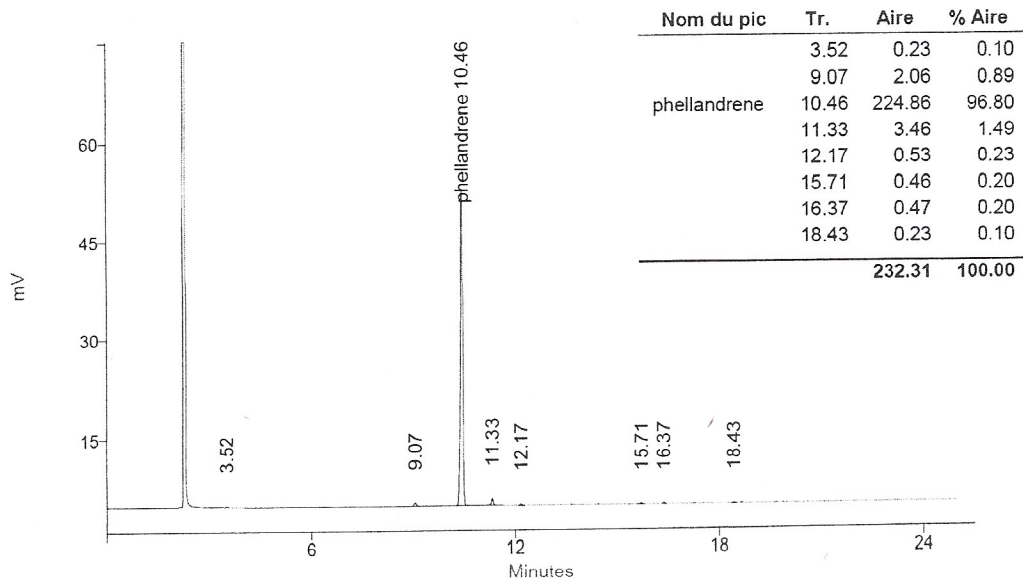
CAS Number	[4221-98-1]
Molecular formula	C ₁₀ H ₁₆
Molecular weight	136,24

ANALYSIS

TEST	SPECIFICATION (June 2016, version 10)	RESULT
Appearance	Liquid	Conform
[α] _D	-(230 \pm 10) ^o c=0.5 in diethylether	-221 ^o
Moisture		< 0.2 %
Assay (GC)*	\geq 95% (sum of enantiomers)	Conform

GC

Column DB5 capillary 30m x 0.32 mm x 0.25 μ m
 Temperature Column 70 (10 min) to 220^oC (10^oC/min)
 Injector 200^oC, Detector 230^oC
 Detector FID
 Carrier gas Helium 1 ml/min
 Sample solvent Isopropanol



Contains 1000ppm BHT as inhibitor

The values given on the 'Certificate of Analysis' are the results determined at the time of analysis

Storage

Flammable. Store at <-15^oC. UNSTABLE

Prepared by:

Ramesh Mandadi

Ramesh Mandadi
Director of Operations

Reviewed and Approved by:

Sujata Moton

Sujata Moton
VP