

CERTIFICATE OF ANALYSIS

Product Name ISOPROPYL ALCOHOL, 99%, HPLC/UV
Grade Meets ACS HPLC/UV Monograph
Catalog # 231HPLC99
Lot # C21B15007
Date of Manufacture: 02/15/21
Recommended Retest Date: Five Years from Date of Manufacture

TEST	MONO GRAPH	SPECIFICATION	RESULT
Assay (corrected for water)	USP	99.0% min	99.95%
Assay (corrected for water)	ACS	99.5% min	
Solubility in water	ACS ⁺	To Pass Test	Pass
Appearance	ACS ⁺	Clear, colorless liquid	Pass
Color, APHA	ACS	10 max	1
Limit of Nonvolatile Residue	USP ⁺	NMT 2.5 mg (0.005%)	0.0 mg
Residue after Evaporation	ACS ⁺	0.001% max	0.000%
Specific Gravity	USP	0.783 - 0.787 @25°C	0.783
Identification A - Infrared Absorption	USP	To Pass Test	Pass
Identification B	USP	To Pass Test	Pass
Refractive Index @ 20°C	USP	1.376-1.378	1.377
Acidity	USP ⁺	NMT 0.70 ml of 0.020N NaOH is required	0.55 mL
Titration Acid or Base	ACS ⁺	0.0001 meq/g	0.0001 meq/g
Carbonyl Compounds	ACS	Propionaldehyde 0.002% max Acetone 0.002% max	< 0.002% None Detected
Limit of Volatile Impurities	USP	Diethyl Ether NMT 0.1% Acetone NMT 0.1% Diisopropyl Ether NMT 0.1% n-Propyl Alcohol NMT 0.1% 2-Butanol NMT 0.1% Total NMT 1.0%	< 0.1% None Detected < 0.1% < 0.1% < 0.1% < 0.1%
Water, wt%	ACS	NMT 0.2%	0.03%
Water Determination	USP	NMT 0.5%	

CERTIFICATE OF ANALYSIS
n-HEXANES, 95%
Reagent ACS/ High Purity/ HPLC Grade

Lot # C20K23CAS000HX95

Date of Manufacture: December 16, 2020

Recommended Retest Date: Three Years from Date of Manufacture

Main Catalog #: 35995HPLC

TEST	SPECIFICATIONS	RESULTS
Assay (by GC-FID)		
(as n-Hexane)	Min 95 %	99.56 %
(Sum of 5 Isomers, Total Hexanes & Methylcyclopentane)	Min 98.5 %	99.99 %
(as C6 Hydrocarbons)	Min 99.5 %	99.96 %
Identification by		
IR Spectroscopy	Passes Test	Passes
Description		
Clear colorless liquid free of suspended matter	Passes Test	Passes
Color	Max 10 APHA	< 5 APHA
Residue after Evaporation	Max 10 ppm	< 0.2 ppm
Water		
(by KF coulometry)	Max 0.02 %	0.003 %
Water soluble titrable acid	Max 0.0003 meq/g	0.0001 meq/g
Sulfur compounds		
(as Sulfur)	Max 0.005 %	< 0.00015 %
Thiophene	Passes Test	Passes
LC Suitability	Passes Test	Passes
Optical Absorbance at		
195 nm	Max 1.00 AU	0.33 AU
210 nm	Max 0.30 AU	0.08 AU

Approved



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 Quality Assurance Clerk

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