



## Certificate of Analysis: Isopropyl Alcohol 99%

DATE: 9/11/2023

PRODUCT: Isopropyl Alcohol- USP

BVV PRODUCT NUMBER: ISOPRO-XX

LOT NUMBER: XG17T3I0I

<u>Property</u>	<u>Results</u>	<u>Specifications</u>	<u>Assay</u>
Purity, wt%	GC	99.8 Min	99.9
Methanol (0.02 % Max)	GC	Pass	Pass
Ethyl Ether (0.1% Max)	GC	Pass	Pass
Acetone (0.1 % Max)	GC	Pass	Pass
Diisopropyl Ether (0.1 % Max)	GC	Pass	Pass
1-propanol (0.1 % Max)	GC	Pass	Pass
2-butanol (0.1 % Max)	GC	Pass	Pass
Any Individual Impurity(0.1 %Max)	GC	Pass	Pass
Total Impurities(1.0% Max)	GC	Pass	Pass
Water, wt%	TM01-05	0.05 Max	0.035
APHA Color, Pt-Co	TM01-01	5 Max	3
Acidity as Acetic Acid, wt%	TM01-04	0.001 Max	0.001
Appearance	TM01-36	Clear& FFMSM	Pass
Density@ 20°C, g/mL	TM01-03	0.785 - 0.786	0.785
Specific Gravity @ 20 /20°C	TM01-03	0.785 - 0.787	0.787
Specific Gravity @ 25/25°C	TM01-03	0.783 - 0.787	0.783
Non Volatile Residue, g/100mL	TM01-17	0.0010 Max	0.0002
Refractive Index @ 20°C	TM01-30	1.376 - 1.378	1.377
Distillation IBP, °C	TM01-09	81.8 Min	82.1
Distillation DP, °C	TM01-09	82.8 Max	82.4
Water Miscibility	TM01-37	Clear & Miscible	Pass
Identification by IR	TM01-40	Pass	Pass
Identification by GC Retention	TM01-43	Pass	Pass

**NOTE:**

BVV uses dedicated equipment in the process area for this product. BVV packaged this material to maintain Food Grade designation.

Please consult the SDS for further information.

BVV represents only that the Product shall meet the specifications herein. All transactions involving this Product are subject to BVV standard terms and conditions. BVV makes no additional representations or warranties, express or implied, through this COA.