

**PRODUCT SPECIFICATION SHEET**  
**ISOPROPYL ALCOHOL 99%**  
**Meets REAGENT ACS/USP/NF GRADE Monographs**  
**Meets TT-I-735a Grade A and B**  
**Meets ASTM D770**

Main Catalog #: 231ASTM99 – Size Code\*

Available in the following sizes:

\*Refer to Master Price List – Individual package sizes have unique size codes

PRODUCT SPECIFICATIONS	MONO GRAPH	LIMITS	TYPICAL RESULT
Assay by GC, corrected for water, min.	ACS USP	99.5% 99.0%	99.9%
Identification A	USP	To Pass	Pass
Identification B	USP	To Pass	Pass
Color (APHA), max.	ACS TT-I-735 D-770	NMT 10	1
Appearance	ACS	Clear liquid	Pass
Solubility in Water	ACS	Solution as clear as equal volume of water	Pass
Water Miscibility	D-770	To Pass	Pass
Residue After Evaporation, max. Limit of Nonvolatile Residue	ACS USP	0.001% NMT 2.5 mg (0.005%)	0.000% 0.0 mg
Nonvolatile Matter	TT-I-735 D-770	0.002 g/100 mL max. 5 mg/100 mL max.	0.000 g/100 mL 0 mg/100 mL
Carbonyl Compounds 0.002% max each of Propionaldehyde or Acetone	ACS	0.002%	0.000%
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% <0.1% <0.1% <0.1% <0.1% <1.0%
Titration Acid or Base, max.	ACS	0.0001 meq/g	<0.0001 meq/g
Acidity	USP	NMT 0.70 ml of 0.02N NaOH required for neutralization	0.52 mL
Acidity (as acetic acid)	TT-I-735 D-770	0.002% max.	<0.002%
Water, max. Water Determination Water	ACS USP D-770 TT-I-735	0.2% NMT 0.5% 0.2% max.	0.06%
Water content	Grade A TT-I-735	0.10% max 0.40% max.	

<b>PRODUCT SPECIFICATIONS</b>	<b>MONO GRAPH</b>	<b>LIMITS</b>	<b>TYPICAL RESULT</b>
	Grade B		
Refractive Index @ 20C	USP	1.376-1.378	1.377
Specific Gravity @ 25C	USP	0.783-0.787	0.783
Specific Gravity	D-770	0.785 - 0.787 @20C 0.782 - 0.784 @25C	0.786 0.783
Specific Gravity	TT-I-735 Grade A	0.7862 - 0.7870 @20C	0.7863
Specific Gravity	TT-I-735 Grade B	0.7862 - 0.7878 @20C	0.7863
Distillation Range	TT-I-735	81.8°C - 83.0°C	Pass
Distillation Range	D-770	Distills entirely within 1.5°C range which shall include 82.3°C	Pass

Form Isopropanol 99%, Mil/ASTM, Rev. 1.0, 12/18, EF

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.