

**Isopropyl Alcohol 91%**
**Grade:** USP/NF

**Catalog number:** ZP230USP/NF

Test	Mono-graph	Specification	Typical Result
Identification A – Infrared Absorption	USP	To Pass Test	Pass
Identification B – Limit of Methanol	USP	NMT 0.02%	Pass
Limit of Nonvolatile Residue	USP	The weight of the residue does not exceed 2.5 mg (0.005%)	0.0 mg
Volatile Impurities – Methanol	USP	NMT 0.02% (v/v)	LT 0.02%
Volatile Impurities – Ethyl Ether	USP	NMT 0.1% (v/v)	LT 0.1%
Volatile Impurities – Acetone	USP	NMT 0.1% (v/v)	None Detected
Volatile Impurities – Diisopropyl Ether	USP	NMT 0.1% (v/v)	LT 0.1%
Volatile Impurities – 1-Propanol	USP	NMT 0.1% (v/v)	LT 0.1%
Volatile Impurities – 2-Butanol	USP	NMT 0.1% (v/v)	LT 0.1%
Volatile Impurities – Individual unspecified impurity	USP	NMT 0.1% (v/v)	LT 0.1%
Volatile Impurities – Total Impurities	USP	NMT 1.0%	LT 0.1%
Specific Gravity	USP	0.815 – 0.810	0.814
Assay	USP	91.0% - 93.0% (v/v)	Pass
Refractive Index	USP	1.376 – 1.378 at 20°C	1.377
Acidity	USP	NMT 0.70 mL of 0.020 N Sodium Hydroxide is required for neutralization.	0.20 mL

**Certification and Compliance Statements**

This product complies with all of the current requirements listed in the United States Pharmacopeia monograph.

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

No chemicals whatsoever are used as solvents at any point in the manufacture, processing or packaging of Isopropyl Alcohol. Only Class 2 and Class 3 residual solvents may appear as impurities / related substances / low level contaminants in IPA. Concentration of Class 2 Option 1 and Class 3 residual solvents is below limits in the current USP/NF General Chapter <467>.

Greenfield Products are for further commercial manufacturing, laboratory use, or research. Greenfield is not registered with the United States Food and Drug Administration (FDA) as a drug manufacturing facility. Greenfield products are not registered with the FDA as active pharmaceutical ingredients in drug manufacturing.

Appropriate/legal use of all products are the responsibility of the user and subject to applicable local laws and regulations.