

n-Propyl Alcohol World/GMP, WORLD GRADE®

Grade: ACS/FCC/EP **Catalog number:** 334WORLD

Test	Mono- graph	Specification	Typical Result
Assay (by GC, corrected for water)	ACS	NLT 99.5%	99.95 %
Assay	FCC	NLT 99.0% of C3H8O	99.97 %
Solubility in Water	ACS	To pass test	Pass
Color (APHA)	ACS	10 max	2
Residue after Evaporation	ACS	0.001% max	0.000 %
Non-volatile Matter	EP	0.004% max	0.000 %
Titrable Acid	ACS	0.0004 meq/g max	0.0002 meq/g
Acidity or Alkalinity	EP	The solution is pink	Pass
Carbonyl Compounds (as Propionaldehyde)	ACS	0.03% max	LT 0.03%
Ethyl Alcohol	ACS	0.01% max	0.01%
Methanol	ACS	0.01% max	0.01%
Isopropyl Alcohol	ACS	0.05% max	0.01%
Related Substances – Any Impurity	EP	0.1% max	LT 0.1%
Related Substances – Total Impurities	EP	0.3% max	LT 0.3%
Water	ACS	0.2% max	0.02 %
Water	EP	0.2% max	0.02 %
Identification - Infrared Spectra	FCC	Conforms to Reference Spectra	Pass



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Test	Mono- graph	Specification	Typical Result
Identification C - Infrared Absorption	EP	Conforms to Reference Spectra	Pass
Refractive Index	FCC	1.383 – 1.388 @ 20°C	1.385
Identification A - Refractive Index	EP	1.384 – 1.387 @ 20°C	1.385
Specific Gravity	FCC	0.800 - 0.805 @25°C	0.802
Identification B - Boiling Point	EP	96°C - 98°C	Pass
Identification D	EP	Meets Requirement of Test	Pass
Appearance	EP	The substance to be examined is clear and colorless. After 5 min, the solution is clear.	Pass
Absorbance @ 230 nm	EP	0.300 max	0.050 nm
Absorbance @ 250 nm	EP	0.100 max	0.020 nm
Absorbance @ 270 nm	EP	0.030 max	0.010 nm
Absorbance @ 290 nm	EP	0.020 max	0.010 nm
Absorbance @ 310 nm	EP	0.010 max	0.000 nm
Reducing Substances	EP	To Pass Test	Pass
Ag (Silver)	USP<232>	Lot Analysis	0.00 ppm
As (Arsenic)	USP<232>	Lot Analysis	0.00 ppm
Au (Gold)	USP<232>	Lot Analysis	0.00 ppm
Ba (Barium)	USP<232>	Lot Analysis	0.00 ppm
Cd (Cadmium)	USP<232>	Lot Analysis	0.00 ppm
Co (Cobalt)	USP<232>	Lot Analysis	0.00 ppm
Cr (Chromium)	USP<232>	Lot Analysis	0.00 ppm



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Test	Mono- graph	Specification	Typical Result
Cu (Copper)	USP<232>	Lot Analysis	0.00 ppm
Hg (Mercury)	USP<232>	Lot Analysis	0.00 ppm
lr (Iridium)	USP<232>	Lot Analysis	0.00 ppm
Li (Lithium)	USP<232>	Lot Analysis	0.00 ppm
Mo (Molybdenum)	USP<232>	Lot Analysis	0.00 ppm
Ni (Nickel)	USP<232>	Lot Analysis	0.00 ppm
Os (Osmium)	USP<232>	Lot Analysis	0.00 ppm
Pb (Lead)	USP<232>	Lot Analysis	0.00 ppm
Pd (Palladium)	USP<232>	Lot Analysis	0.00 ppm
Pt (Platinum)	USP<232>	Lot Analysis	0.00 ppm
Rh (Rhodium)	USP<232>	Lot Analysis	0.00 ppm
Ru (Ruthenium)	USP<232>	Lot Analysis	0.00 ppm
Sb (Antimony)	USP<232>	Lot Analysis	0.00 ppm
Se (Selenium)	USP<232>	Lot Analysis	0.00 ppm
Sn (Tin)	USP<232>	Lot Analysis	0.00 ppm
TI (Thallium)	USP<232>	Lot Analysis	0.00 ppm
V (Vanadium)	USP<232>	Lot Analysis	0.00 ppm

Certification and Compliance Statements

This product is processed and packaged in compliance with Good Manufacturing Practices.

This product complies with all of the current requirements listed in the American Chemical Society, Food Chemical Codex and European Pharmacopeia monographs.



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

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.