



**ChemPure* Brand
Chemicals**

Date: 12/5/2019

Certificate of Analysis

...Pure Quality

Product:
Cat:
Lot:
**Date of
Manufacture: Use
Before Date:**

Isopropyl Alcohol (2-Propanol)
CP-C9933
DX911CP
12/05/2019
12/04/2020

Meets ACS/HPLC/LC-MS Application Specifications

Parameter	Specification		Result	Units
	Min.	Max.		
Appearance (Color)	Colorless		Colorless	
Appearance (Form)	Liquid		Liquid	
GC Analysis	99.9		>99.99	%
Non-volatile Matter		0.0005	<0.0005	%
Water by Karl Fischer Titration		0.050	0.008	%
Free Acid (as C ₂ H ₅ COOH)		0.001	<0.001	%
Trace Metals Analysis				
Silver (Ag)		0.1	<0.1	ppm
Aluminum (Al)		0.5	<0.5	ppm
Barium (Ba)		0.1	<0.1	ppm
Calcium (Ca)		0.1	<0.1	ppm
Cadmium (Cd)		0.05	<0.05	ppm
Cobalt (Co)		0.02	<0.02	ppm
Chromium (Cr)		0.02	<0.02	ppm
Copper (Cu)		0.02	<0.02	ppm
Iron (Fe)		0.1	<0.1	ppm
Potassium (K)		0.1	<0.1	ppm
Magnesium (Mg)		0.1	<0.1	ppm
Manganese (Mn)		0.02	<0.02	ppm
Sodium (Na)		0.1	<0.1	ppm
Nickel (Ni)		0.02	<0.02	ppm
Lead (Pb)		0.1	<0.1	ppm
Tin (Sn)		0.1	<0.1	ppm
Zinc (Zn)		0.1	<0.1	ppm
UV Transmittance at 220nm	50		64.1	%
UV Transmittance at 230nm	75		80.2	%
UV Transmittance at 260nm	98		98.4	%
HPLC Gradient @ 254 nm		5	<5	mAU
Fluorescence @ 254 nm (as Quinine)		1	<1	ppb
Fluorescence @ 365 nm (as Quinine)		1	<1	ppb
LC-MS Positive Mode (caffeine)	Passes test		Passes test	
LC-MS Positive Mode (as reserpine)		50	<50	ppb
LC-MS Negative Mode (4-nitrophenol)		50	<50	ppb
Suitability for the LC-MS	Suitable		Suitable	