Methanol
CMOS

Material No.: 9073-05
Batch No.: 0000271244
Manufactured Date: 2020/10/26
Retest Date: 2025/10/25
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC)	>= 99.9 %	100.0
Color (APHA)	<= 10	< 5
Acidity (µeq/g)	<= 0.3	0.2
Alkalinity (µeq/g)	<= 0.1	0.1
Heavy Metals (as Pb)	<= 100 ppb	< 50
Residue after Evaporation	<= 5 ppm	< 1
Water (H_2O)(by Karl Fischer titrn)	<= 0.05 %	0.01
Solubility in H_2O	Passes Test	PT
Chloride (Cl)	<= 0.2 ppm	< 0.2
Phosphate (PO_4)	<= 0.3 ppm	< 0.3
Sulfate (SO_4)	<= 0.5 ppm	< 0.5
Trace Impurities - Aluminum (Al)	<= 50.0 ppb	< 5.0
Trace Impurities - Arsenic (As)	<= 5.0 ppb	< 2.0
Trace Impurities - Antimony (Sb)	<= 5.0 ppb	< 1.0
Trace Impurities - Barium (Ba)	<= 20.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 10.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 20.0 ppb	< 1.0
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	1.9
Trace Impurities - Chromium (Cr)	<= 20.0 ppb	< 1.0
Trace Impurities - Cobalt (Co)	<= 20.0 ppb	< 1.0
Trace Impurities - Copper (Cu)	<= 10.0 ppb	< 1.0
Trace Impurities - Gallium (Ga)	<= 50.0 ppb	< 1.0
Trace Impurities - Germanium (Ge)	<= 50.0 ppb	< 10.0
Trace Impurities - Gold (Au)	<= 20.0 ppb	< 5.0

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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Test	Specification	Result
Trace Impurities - Iron (Fe)	<= 50.0 ppb	3.4
Trace Impurities - Lead (Pb)	<= 50.0 ppb	< 10.0
Trace Impurities - Lithium (Li)	<= 50.0 ppb	< 1.0
Trace Impurities - Magnesium (Mg)	<= 50.0 ppb	< 1.0
Trace Impurities - Manganese (Mn)	<= 10.0 ppb	< 1.0
Trace Impurities - Molybdenum (Mo)	<= 300.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 10.0 ppb	< 5.0
Trace Impurities - Potassium (K)	<= 50.0 ppb	< 10.0
Trace Impurities - Silicon (Si)	<= 50.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 20.0 ppb	< 1.0
Trace Impurities - Sodium (Na)	<= 50.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 10.0 ppb	< 1.0
Trace Impurities - Tin (Sn)	<= 50.0 ppb	< 10.0
Trace Impurities - Titanium (Ti)	<= 20.0 ppb	< 1.0
Trace Impurities - Vanadium (V)	<= 300.0 ppb	< 1.0
Trace Impurities - Zinc (Zn)	<= 50.0 ppb	< 1.0
Trace Impurities - Zirconium (Zr)	<= 300.0 ppb	< 1.0
Particle Count - 0.5 µm and greater	<= 100 par/ml	9
Particle Count - 1.0 µm and greater	<= 8 par/ml	5

For Microelectronic Use

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

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