2-Propanol VLSI

(iso-propyl alcohol)





Material No.: 5373-05 Batch No.: 0000132347 Manufactured Date: 2015/11/30 Retest Date: 2020/11/28

Certificate of Analysis

Test	Specification	Result
ssay (CH3CHOHCH3)	>= 99.5 %	100.0
olor (APHA)	<= 10	5
esidue after Evaporation	<= 4 ppm	< 1
olubility in H2O	Passes Test	РТ
/ater (H2O)(by Karl Fischer titrn)	<= 0.05 %	0.01
cidity (µeq/g)	<= 0.2	0.1
lkalinity (µeq/g)	<= 0.1	< 0.1
hloride (Cl)	<= 0.1 ppm	< 0.1
hosphate (PO4)	<= 0.3 ppm	< 0.3
race Impurities – Aluminum (Al)	<= 50.0 ppb	< 5.0
rsenic and Antimony (as As)	<= 10 ppb	< 10
race Impurities – Barium (Ba)	<= 20.0 ppb	< 1.0
race Impurities – Boron (B)	<= 10.0 ppb	< 5.0
race Impurities – Cadmium (Cd)	<= 20.0 ppb	< 1.0
race Impurities – Calcium (Ca)	<= 50.0 ppb	3.9
race Impurities – Chromium (Cr)	<= 20.0 ppb	< 1.0
race Impurities – Cobalt (Co)	<= 20.0 ppb	< 1.0
race Impurities – Copper (Cu)	<= 10.0 ppb	< 1.0
race Impurities – Gallium (Ga)	<= 50.0 ppb	< 1.0
race Impurities – Germanium (Ge)	<= 50.0 ppb	< 10.0
race Impurities – Gold (Au)	<= 20.0 ppb	< 5.0
eavy Metals (as Pb)	<= 200 ppb	< 100
race Impurities – Iron (Fe)	<= 50.0 ppb	1.1
race Impurities – Lead (Pb)	<= 20.0 ppb	< 10.0

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600 Avantor ™ Performance Materials Inc.

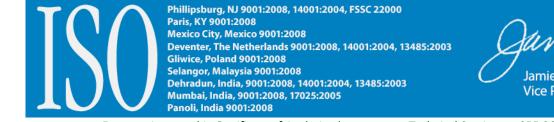
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Test	Specification	Result
Trace Impurities – Lithium (Li)	<= 50.0 ppb	< 1.0
Trace Impurities – Magnesium (Mg)	<= 20.0 ppb	< 1.0
Trace Impurities – Manganese (Mn)	<= 20.0 ppb	< 1.0
Trace Impurities – Nickel (Ni)	<= 10.0 ppb	< 5.0
Trace Impurities – Potassium (K)	<= 100.0 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)	<= 100.0 ppb	66.1
Trace Impurities – Strontium (Sr)	<= 20.0 ppb	< 1.0
Trace Impurities – Tin (Sn)	<= 100.0 ppb	< 10.0
Trace Impurities – Titanium (Ti)	<= 20.0 ppb	< 1.0
Trace Impurities – Zinc (Zn)	<= 50.0 ppb	1.0
Particle Count – 0.5 µm and greater	<= 100 par/ml	7
Particle Count – 1.0 µm and greater	<= 8 par/ml	2

For Microelectronic Use

Reported value is the average of all samples counted for this lot number, with no individual sample value exceeding the specification.

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



James Techie

Jamie Ethier Vice President Global Quality

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