



Material No.: 5370-05 Batch No.: 22F2661004 Manufactured Date: 2022-06-20 Retest Date: 2027-06-19 Revision No.: 0

Certificate of Analysis

Assay (CH:OH) (by GC) ≥ 99.9 % 99.9 % Color (APHA) ≤ 10 < 5 Acidity (µeq/g) ≤ 0.3 0.2 Alkalinity (µeq/g) ≤ 0.1 < 0.1 Residue after Evaporation ≤ 5 ppm < 1 ppm Water (H:20)(by Karl Fischer titrn) ≤ 0.05 % 0.01 % Solubility in H:O Passes Test Passes Test Arsenic and Antimony (as As) ≤ 10.0 ppb < 1.0 ppb Chloride (Cl) ≤ 0.2 ppm < 0.2 ppm Heavy Metals (as Pb) ≤ 100.0 ppb < 100.0 ppb Phosphate (PO4) ≤ 0.3 ppm < 5.0 ppb Trace Impurities - Aluminum (Al) ≤ 50.0 ppb < 5.0 ppb Trace Impurities - Barium (Ba) ≤ 10.0 ppb < 1.0 ppb Trace Impurities - Boron (B) ≤ 10.0 ppb < 1.0 ppb Trace Impurities - Cobati (Cd) ≤ 20.0 ppb < 1.0 ppb Trace Impurities - Cobati (Ca) ≤ 20.0 ppb < 1.0 ppb Trace Impurities - Cobati (Ca) ≤ 0.0 ppb < 1.0 ppb Trace Impurities - Cobati (Ca) ≤ 0.0 ppb < 1.0 ppb	Test	Specification	Result
Acidity (µeq/g)≤ 0.30.2Alkalinity (µeq/g)≤ 0.1< 0.1	Assay (CH₃OH) (by GC)	≥ 99.9 %	99.9 %
Alkalinity (µeq/g)< 0.1< 0.1Residue after Evaporation< 5 ppm	Color (APHA)	≤ 10	< 5
Residue after Evaporation≤ 5 ppm< 1 ppmWater (H_2O)(by Karl Fischer titrn)≤ 0.05 %0.01 %Solubility in H_2OPasses TestPasses TestArsenic and Antimony (as As)≤ 10.0 ppb< 1.0 ppb	Acidity (µeq/g)	≤ 0.3	0.2
Water (H2O)(by Karl Fischer titrn) $\leq 0.05 \%$ 0.01% Solubility in H2OPasses TestPasses TestArsenic and Antimony (as As) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Chloride (Cl) $\leq 0.2 \text{ ppm}$ $< 0.2 \text{ ppm}$ Heavy Metals (as Pb) $\leq 100.0 \text{ ppb}$ $< 100.0 \text{ ppb}$ Phosphate (PO4) $\leq 0.3 \text{ ppm}$ $< 0.3 \text{ ppm}$ Trace Impurities - Aluminum (Al) $\leq 50.0 \text{ ppb}$ $< 5.0 \text{ ppb}$ Trace Impurities - Boron (B) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cadmium (Cd) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cadmium (Cd) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Colium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Colium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Colium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Colium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Colium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Colium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Colium (Ca) $\leq 50.0 \text{ ppb}$	Alkalinity (µeq/g)	≤ 0 .1	< 0.1
Solubility in H_{2O} Passes TestPasses TestArsenic and Antimony (as As) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Chloride (Cl) $\leq 0.2 \text{ ppm}$ $< 0.2 \text{ ppm}$ Heavy Metals (as Pb) $\leq 100.0 \text{ ppb}$ $< 100.0 \text{ ppb}$ Phosphate (POa) $\leq 0.3 \text{ ppm}$ $< 0.3 \text{ ppm}$ Trace Impurities - Aluminum (Al) $\leq 50.0 \text{ ppb}$ $< 5.0 \text{ ppb}$ Trace Impurities - Barium (Ba) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Barium (Cd) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cadmium (Cd) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Calcium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Golium (Ga) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Iron (Fe) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnesium (Mg) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnese (Mn) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$	Residue after Evaporation	≤ 5 ppm	< 1 ppm
Arsenic and Antimony (as As) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Chloride (Cl) $\leq 0.2 \text{ ppm}$ $< 0.2 \text{ ppm}$ Heavy Metals (as Pb) $\leq 100.0 \text{ ppb}$ $< 100.0 \text{ ppb}$ Phosphate (P04) $\leq 0.3 \text{ ppm}$ $< 0.3 \text{ ppm}$ Trace Impurities - Aluminum (Al) $\leq 50.0 \text{ ppb}$ $< 5.0 \text{ ppb}$ Trace Impurities - Barium (Ba) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Boron (B) $\leq 10.0 \text{ ppb}$ $< 5.0 \text{ ppb}$ Trace Impurities - Cadmium (Cd) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Calcium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ $< 5.0 \text{ ppb}$ Trace Impurities - Lichium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Lichium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnesium (Mg) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnese (Mn) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnese (Mn) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$	Water (H2O)(by Karl Fischer titrn)	\leq 0.05 %	0.01 %
Chloride (Cl)< 0.2 pm< 0.2 pmHeavy Metals (as Pb)< 100.0 ppb	Solubility in H2O	Passes Test	Passes Test
Heavy Metals (as Pb) ≤ 100.0 ppb < 100.0 ppb	Arsenic and Antimony (as As)	\leq 10.0 ppb	< 1.0 ppb
Phosphate (PO4)< 0.3 pm< 0.3 pmTrace Impurities - Aluminum (AI)< 50.0 ppb	Chloride (Cl)	\leq 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al) \leq 50.0 ppb $<$ 5.0 ppbTrace Impurities - Barium (Ba) \leq 20.0 ppb $<$ 1.0 ppbTrace Impurities - Boron (B) \leq 10.0 ppb $<$ 5.0 ppbTrace Impurities - Cadmium (Cd) \leq 20.0 ppb $<$ 1.0 ppbTrace Impurities - Calcium (Ca) \leq 50.0 ppb1.1 ppbTrace Impurities - Chromium (Cr) \leq 20.0 ppb $<$ 1.0 ppbTrace Impurities - Cobalt (Co) \leq 20.0 ppb $<$ 1.0 ppbTrace Impurities - Copper (Cu) \leq 10.0 ppb $<$ 1.0 ppbTrace Impurities - Copper (Cu) \leq 10.0 ppb $<$ 1.0 ppbTrace Impurities - Germanium (Ge) \leq 50.0 ppb $<$ 1.0 ppbTrace Impurities - Gold (Au) \leq 20 ppb $<$ 10.0 ppbTrace Impurities - Gold (Au) \leq 20 ppb $<$ 5 ppbTrace Impurities - Iron (Fe) \leq 50.0 ppb $<$ 10.0 ppbTrace Impurities - Lead (Pb) \leq 50.0 ppb $<$ 1.0 ppbTrace Impurities - Lithium (Li) \leq 50.0 ppb $<$ 1.0 ppbTrace Impurities - Magnesium (Mg) \leq 50.0 ppb $<$ 1.0 ppbTrace Impurities - Magnese (Mn) \leq 10.0 ppb $<$ 1.0 ppb	Heavy Metals (as Pb)	≤ 100.0 ppb	< 100.0 ppb
Trace Impurities - Barium (Ba) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Boron (B) $\leq 10.0 \text{ ppb}$ $< 5.0 \text{ ppb}$ Trace Impurities - Cadmium (Cd) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Calcium (Ca) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Chromium (Cr) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 50.0 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Gallium (Ga) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Gord (Au) $\leq 20 \text{ ppb}$ $< 50.0 \text{ ppb}$ Trace Impurities - For (Fe) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnesium (Mg) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnese (Mn) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$	Phosphate (PO4)	\leq 0.3 ppm	< 0.3 ppm
Trace Impurities - Boron (B)≤ 10.0 ppb< 5.0 ppbTrace Impurities - Cadmium (Cd)≤ 20.0 ppb< 1.0 ppb	Trace Impurities – Aluminum (Al)	≤ 50.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Calcium (Ca) $\leq 50.0 \text{ ppb}$ 1.1 ppb Trace Impurities - Chromium (Cr) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ 1.0 ppb Trace Impurities - Gallium (Ga) $\leq 50 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Germanium (Ge) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ $< 5 \text{ ppb}$ Trace Impurities - Iron (Fe) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Lead (Pb) $\leq 50.0 \text{ ppb}$ $< 10 \text{ ppb}$ Trace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnesium (Mg) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Manganese (Mn) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$	Trace Impurities – Barium (Ba)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Calcium (Ca) $\leq 50.0 \text{ ppb}$ 1.1 ppbTrace Impurities - Chromium (Cr) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ 1.0 ppb Trace Impurities - Gallium (Ga) $\leq 50 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Germanium (Ge) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ $< 5 \text{ ppb}$ Trace Impurities - Iron (Fe) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Lead (Pb) $\leq 50.0 \text{ ppb}$ $< 10 \text{ ppb}$ Trace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnesium (Mg) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Manganese (Mn) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$	Trace Impurities – Boron (B)	\leq 10.0 ppb	< 5.0 ppb
Trace Impurities - Chromium (Cr) $\leq 20.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Cobalt (Co) $\leq 20 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ 1.0 ppb Trace Impurities - Gallium (Ga) $\leq 50 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Germanium (Ge) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ $< 5 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ $< 5 \text{ ppb}$ Trace Impurities - Iron (Fe) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnesium (Mg) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$	Trace Impurities – Cadmium (Cd)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co) $\leq 20 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ 1.0 ppb Trace Impurities - Gallium (Ga) $\leq 50 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Germanium (Ge) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ $< 5 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 50.0 \text{ ppb}$ $< 5 \text{ ppb}$ Trace Impurities - Iron (Fe) $\leq 50.0 \text{ ppb}$ $< 10 \text{ ppb}$ Trace Impurities - Lead (Pb) $\leq 50.0 \text{ ppb}$ $< 10 \text{ ppb}$ Trace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnesium (Mg) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Manganese (Mn) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$	Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	1.1 ppb
Trace Impurities - Copper (Cu) $\leq 10.0 \text{ ppb}$ 1.0 ppbTrace Impurities - Gallium (Ga) $\leq 50 \text{ ppb}$ $< 1 \text{ ppb}$ Trace Impurities - Germanium (Ge) $\leq 50.0 \text{ ppb}$ $< 10.0 \text{ ppb}$ Trace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ $< 5 \text{ ppb}$ Trace Impurities - Iron (Fe) $\leq 50.0 \text{ ppb}$ $< 10 \text{ ppb}$ Trace Impurities - Lead (Pb) $\leq 50.0 \text{ ppb}$ $< 10 \text{ ppb}$ Trace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Magnesium (Mg) $\leq 50.0 \text{ ppb}$ $< 1.0 \text{ ppb}$ Trace Impurities - Manganese (Mn) $\leq 10.0 \text{ ppb}$ $< 1.0 \text{ ppb}$	Trace Impurities – Chromium (Cr)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)< 50 ppb< 1 ppbTrace Impurities - Germanium (Ge)< 50.0 ppb	Trace Impurities – Cobalt (Co)	≤ 20 ppb	< 1 ppb
Trace Impurities - Germanium (Ge) $\leq 50.0 \text{ ppb}$ <10.0 ppbTrace Impurities - Gold (Au) $\leq 20 \text{ ppb}$ <5 ppb	Trace Impurities – Copper (Cu)	\leq 10.0 ppb	1.0 ppb
Trace Impurities - Gold (Au)≤ 20 ppb< 5 ppbTrace Impurities - Iron (Fe)≤ 50.0 ppb4.9 ppbTrace Impurities - Lead (Pb)≤ 50 ppb< 10 ppb	Trace Impurities – Gallium (Ga)	≤ 50 ppb	< 1 ppb
Trace Impurities - Iron (Fe) \leq 50.0 ppb4.9 ppbTrace Impurities - Lead (Pb) \leq 50 ppb $<$ 10 ppbTrace Impurities - Lithium (Li) \leq 50.0 ppb $<$ 1.0 ppbTrace Impurities - Magnesium (Mg) \leq 50.0 ppb $<$ 1.0 ppbTrace Impurities - Manganese (Mn) \leq 10.0 ppb $<$ 1.0 ppb	Trace Impurities – Germanium (Ge)	≤ 50.0 ppb	< 10.0 ppb
Trace Impurities - Lead (Pb) $\leq 50 \text{ ppb}$ < 10 ppbTrace Impurities - Lithium (Li) $\leq 50.0 \text{ ppb}$ < 1.0 ppb	Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Trace Impurities - Lithium (Li)≤ 50.0 ppb< 1.0 ppbTrace Impurities - Magnesium (Mg)≤ 50.0 ppb< 1.0 ppb	Trace Impurities – Iron (Fe)	≤ 50.0 ppb	4.9 ppb
Trace Impurities - Magnesium (Mg)≤ 50.0 ppb< 1.0 ppbTrace Impurities - Manganese (Mn)≤ 10.0 ppb< 1.0 ppb	Trace Impurities - Lead (Pb)	≤ 50 ppb	< 10 ppb
Trace Impurities - Manganese (Mn)< 10.0 ppb< 1.0 ppb	Trace Impurities – Lithium (Li)	≤ 50.0 ppb	< 1.0 ppb
	Trace Impurities – Magnesium (Mg)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni) $\leq 10.0 \text{ ppb}$ $< 5.0 \text{ ppb}$	Trace Impurities – Manganese (Mn)	\leq 10.0 ppb	< 1.0 ppb
	Trace Impurities – Nickel (Ni)	\leq 10.0 ppb	< 5.0 ppb

>>> Continued on page 2 $\rightarrow>>$

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





Material No.: 5370-05 Batch No.: 22F2661004

Specification	Result
≤ 50 ppb	< 10 ppb
≤ 50 ppb	< 10 ppb
≤ 20.0 ppb	< 1.0 ppb
≤ 50.0 ppb	< 5.0 ppb
≤ 10.0 ppb	< 1.0 ppb
≤ 50 ppb	< 10 ppb
≤ 20 ppb	< 1 ppb
≤ 50 ppb	< 1 ppb
\leq 50 par/ml	14 par/ml
≤ 8 par/ml	5 par/ml
	 ≤ 50 ppb ≤ 50 ppb ≤ 20.0 ppb ≤ 50.0 ppb ≤ 10.0 ppb ≤ 50 ppb ≤ 20 ppb ≤ 50 ppb ≤ 50 ppb ≤ 50 par/ml

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: USA Packaging Site: Paris Mfg Ctr & DC

James Ttehier

Jamie Ethier Vice President Global Quality

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