Acetic Acid, Glacial
CMOS

Material No.: 9503-03
Batch No.: 25D0762007
Manufactured Date: 2025-03-03
Retest Date:2030-03-02
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3COOH) (by freezing point)	>= 99.7 %	100.0 %
Color (APHA)	<= 10	5
Acetic Anhydride ($(CH_3CO)_2O$)	<= 0.01 %	0.00 %
Acetaldehyde	<= 0.05 %	<0.01 %
Residue after Evaporation	<= 4 ppm	2 ppm
Solubility in H_2O	Passes Test	Passes Test
Specific Gravity at 20°/20°C	>= 1.048	1.051
Substances Reducing Dichromate	Passes Test	Passes Test
Substances Reducing Permanganate	Passes Test	Passes Test
Chloride (Cl)	<= 0.5 ppm	<0.5 ppm
Phosphate (PO_4)	<= 0.5 ppm	<0.3 ppm
Sulfate (SO_4)	<= 0.5 ppm	<0.5 ppm
Trace Impurities - Aluminum (Al)	<= 50.0 ppb	<5.0 ppb
Arsenic & Antimony (as As)	<= 5.0 ppb	<5.0 ppb
Trace Impurities - Barium (Ba)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Beryllium (Be)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Bismuth (Bi)	<= 50 ppb	<10 ppb
Trace Impurities - Boron (B)	<= 10.0 ppb	<5.0 ppb
Trace Impurities - Cadmium (Cd)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Calcium (Ca)	<= 200.0 ppb	45.0 ppb
Trace Impurities - Chromium (Cr)	<= 30.0 ppb	5.0 ppb
Trace Impurities - Cobalt (Co)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Copper (Cu)	<= 20.0 ppb	5.0 ppb
Trace Impurities - Gallium (Ga)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Germanium (Ge)	<= 10.0 ppb	<10.0 ppb
Trace Impurities - Gold (Au)	<= 10.0 ppb	<10.0 ppb
Heavy Metals (as Pb)	<= 300.0 ppb	<300.0 ppb
Trace Impurities - Iron (Fe)	<= 100.0 ppb	<10.0 ppb

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

Acetic Acid, Glacial
CMOS

Material No.: 9503-03
Batch No.: 25D0762007

Test	Specification	Result
Trace Impurities - Lead (Pb)	<= 100 ppb	<10 ppb
Trace Impurities - Lithium (Li)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Magnesium (Mg)	<= 50.0 ppb	16.0 ppb
Trace Impurities - Manganese (Mn)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	<5.0 ppb
Trace Impurities - Nickel (Ni)	<= 25.0 ppb	<5.0 ppb
Trace Impurities - Niobium (Nb)	<= 10.0 ppb	1.0 ppb
Trace Impurities - Potassium (K)	<= 100 ppb	<10 ppb
Trace Impurities - Silicon (Si)	<= 50 ppb	<10 ppb
Trace Impurities - Silver (Ag)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Sodium (Na)	<= 100.0 ppb	9.0 ppb
Trace Impurities - Strontium (Sr)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Tantalum (Ta)	<= 10.0 ppb	<5.0 ppb
Trace Impurities - Thallium (Tl)	<= 50.0 ppb	<5.0 ppb
Trace Impurities - Tin (Sn)	<= 50 ppb	<10 ppb
Trace Impurities - Titanium (Ti)	<= 100.0 ppb	<1.0 ppb
Trace Impurities - Vanadium (V)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Zinc (Zn)	<= 50 ppb	13 ppb
Trace Impurities - Zirconium (Zr)	<= 10.0 ppb	<1.0 ppb
Particle Count - 1.0 µm and greater	<= 10 par/ml	7 par/ml

For Microelectronic Use
For additional information, go to www.askavantor.com. Search keywords "freezing" and product name.
Storage Condition: IMPORTANT: Material will freeze if stored below 17 °C (63°F).

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production