Toluene
CMOS

Material No.: 9466-03
Batch No.: 24K1361054
Manufactured Date: 2024-11-12
Retest Date:2029-11-11
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($C_6H_5CH_3$) (by GC)	>= 99.5 %	99.9 %
Color (APHA)	<= 10	<5
Acidity (μeq/g)	<= 0.2	0.1
Residue after Evaporation	<= 2.0 ppm	<1.0 ppm
Water (by KF, coulometric)	<= 0.03 %	0.01 %
Substances Darkened by H_2SO_4	Passes Test	Passes Test
Sulfur Compounds (as S)	<= 0.003 %	<0.003 %
Chloride (Cl)	<= 2 ppm	<2 ppm
Phosphate (PO_4)	<= 0.5 ppm	<0.5 ppm
Trace Impurities - Aluminum (Al)	<= 20 ppb	<5 ppb
Arsenic & Antimony (as As)	<= 10.0 ppb	<10.0 ppb
Trace Impurities - Barium (Ba)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Boron (B)	<= 20.0 ppb	<5.0 ppb
Trace Impurities - Cadmium (Cd)	<= 20.0 ppb	<1.0 ppb
Trace Impurities - Calcium (Ca)	<= 100.0 ppb	3.8 ppb
Trace Impurities - Chromium (Cr)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Cobalt (Co)	<= 20 ppb	<1 ppb
Trace Impurities - Copper (Cu)	<= 20.0 ppb	<1.0 ppb
Trace Impurities - Gallium (Ga)	<= 50 ppb	<1 ppb
Trace Impurities - Germanium (Ge)	<= 50.0 ppb	<10.0 ppb
Trace Impurities - Gold (Au)	<= 20 ppb	<5 ppb
Heavy Metals (as Pb)	<= 500.0 ppb	<500.0 ppb
Trace Impurities - Iron (Fe)	<= 20.0 ppb	<1.0 ppb
Trace Impurities - Lithium (Li)	<= 20.0 ppb	<1.0 ppb
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Manganese (Mn)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Nickel (Ni)	<= 20.0 ppb	<5.0 ppb
Trace Impurities - Potassium (K)	<= 50 ppb	<10 ppb

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Trace Impurities - Silicon (Si)	<= 100.0 ppb	<10.0 ppb
Trace Impurities - Silver (Ag)	<= 20.0 ppb	<1.0 ppb
Trace Impurities - Sodium (Na)	<= 100.0 ppb	<5.0 ppb
Trace Impurities - Strontium (Sr)	<= 10.0 ppb	<1.0 ppb
Trace Impurities - Tin (Sn)	<= 30.0 ppb	<10.0 ppb
Trace Impurities - Zinc (Zn)	<= 20.0 ppb	<1.0 ppb
Particle Count - 1.0 μm and greater	<= 10 par/ml	2 par/ml

For Microelectronic Use

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

Michelle Bales

Michelle Bales
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