

Material No.: 5967-05
Batch No.: 0000284365
Manufactured Date: 2021/06/02
Expiration Date: 2023/06/02
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay ($\text{CH}_3\text{CHOHCH}_3$)	$\geq 99.9 \%$	100.0
Color (APHA)	≤ 10	5
Specific Gravity at 20°/20°C	0.785 – 0.787	0.787
Residue after Evaporation	$\leq 4 \text{ ppm}$	1
Solubility in H_2O	Passes Test	PT
Water (H_2O)(by Karl Fischer titrn)	$\leq 0.05 \%$	0.01
Acidity ($\mu\text{eq/g}$)	≤ 0.2	0.1
Alkalinity ($\mu\text{eq/g}$)	≤ 0.1	< 0.1
Bromide (Br)	$\leq 0.2 \text{ ppm}$	< 0.1
Chloride (Cl)	$\leq 0.1 \text{ ppm}$	< 0.1
Fluoride (F)	$\leq 0.2 \text{ ppm}$	< 0.001
Nitrate (NO_3)	$\leq 0.2 \text{ ppm}$	< 0.1
Nitrite (NO_2)	$\leq 0.2 \text{ ppm}$	< 0.1
Phosphate (PO_4)	$\leq 0.3 \text{ ppm}$	0.1
Sulfate (SO_4)	$\leq 0.2 \text{ ppm}$	< 0.1
Trace Impurities – Aluminum (Al)	$\leq 50 \text{ ppb}$	5
Arsenic and Antimony (as As)	$\leq 10 \text{ ppb}$	10
Trace Impurities – Barium (Ba)	$\leq 20 \text{ ppb}$	1
Trace Impurities – Beryllium (Be)	$\leq 100 \text{ ppb}$	1
Trace Impurities – Bismuth (Bi)	$\leq 100 \text{ ppb}$	10
Trace Impurities – Boron (B)	$\leq 10 \text{ ppb}$	5
Trace Impurities – Cadmium (Cd)	$\leq 20 \text{ ppb}$	1
Trace Impurities – Calcium (Ca)	$\leq 50 \text{ ppb}$	1
Trace Impurities – Chromium (Cr)	$\leq 20 \text{ ppb}$	1

Test	Specification	Result
Trace Impurities – Cobalt (Co)	<= 20 ppb	1
Trace Impurities – Copper (Cu)	<= 10 ppb	1
Trace Impurities – Gallium (Ga)	<= 50 ppb	1
Trace Impurities – Germanium (Ge)	<= 50 ppb	10
Trace Impurities – Gold (Au)	<= 20 ppb	5
Heavy Metals (as Pb)	<= 200 ppb	100
Trace Impurities – Iron (Fe)	<= 50 ppb	1
Trace Impurities – Lead (Pb)	<= 20 ppb	10
Trace Impurities – Lithium (Li)	<= 50 ppb	1
Trace Impurities – Magnesium (Mg)	<= 20 ppb	1
Trace Impurities – Manganese (Mn)	<= 15 ppb	1
Trace Impurities – Molybdenum (Mo)	<= 100 ppb	5
Trace Impurities – Nickel (Ni)	<= 10 ppb	5
Trace Impurities – Niobium (Nb)	<= 100 ppb	1
Trace Impurities – Potassium (K)	<= 100 ppb	10
Trace Impurities – Silicon (Si)	<= 50 ppb	10
Trace Impurities – Silver (Ag)	<= 20 ppb	1
Trace Impurities – Sodium (Na)	<= 100 ppb	5
Trace Impurities – Strontium (Sr)	<= 20 ppb	1
Trace Impurities – Tantalum (Ta)	<= 100 ppb	5
Trace Impurities – Thallium (Tl)	<= 10 ppb	5
Trace Impurities – Tin (Sn)	<= 100 ppb	10
Trace Impurities – Titanium (Ti)	<= 20 ppb	1
Trace Impurities – Vanadium (V)	<= 100 ppb	1
Trace Impurities – Zinc (Zn)	<= 50 ppb	1
Trace Impurities – Zirconium (Zr)	<= 100 ppb	1
Particle Count – 0.2 µm and greater	<= 5000 par/ml	63
Particle Count – 0.3 µm and greater	<= 5000 par/ml	18
Particle Count – 0.5 µm and greater	<= 50 par/ml	8
Particle Count – 1.0 µm and greater	<= 8 par/ml	2

For Microelectronic Use

Country of Origin: TW


Jamie Ethier
Vice President Global Quality