

Material No.: 5356-05 Batch No.: 0000215574

Manufactured Date: 2018/11/20 Retest Date: 2023/11/19

Revision No: 1

## Certificate of Analysis

Test	Specification	Result
Assay ((CH3)2CO) (by GC, corrected for water)	>= 99.5 %	99.9
Color (APHA)	<= 10	5
Residue after Evaporation	<= 5 ppm	< 1
Acidity (µeq/g)	<= 0.3	0.2
Alkalinity (µeq/g)	<= 0.5	0.1
Water (H <sub>2</sub> O)	<= 0.5 %	0.1
Solubility in H <sub>2</sub> O	Passes Test	PT
Chloride (Cl)	<= 0.2 ppm	< 0.1
Phosphate (PO <sub>4</sub> )	<= 0.05 ppm	< 0.05
Trace Impurities - Aluminum (Al)	<= 50.0 ppb	< 5.0
Arsenic and Antimony (as As)	<= 5 ppb	< 5
Trace Impurities - Barium (Ba)	<= 20.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Calcium (Ca)	<= 25.0 ppb	< 1.0
Trace Impurities - Chromium (Cr)	<= 20.0 ppb	< 1.0
Trace Impurities - Copper (Cu)	<= 10.0 ppb	< 1.0
Trace Impurities - Gold (Au)	<= 20.0 ppb	< 5.0
Trace Impurities - Iron (Fe)	<= 20.0 ppb	< 1.0
Trace Impurities - Lead (Pb)	<= 20.0 ppb	< 10.0
Trace Impurities - Lithium (Li)	<= 50.0 ppb	< 1.0
Trace Impurities – Magnesium (Mg)	<= 20.0 ppb	< 1.0
Trace Impurities - Manganese (Mn)	<= 10.0 ppb	< 1.0
Trace Impurities - Nickel (Ni)	<= 10.0 ppb	< 5.0
Trace Impurities – Potassium (K)	<= 50.0 ppb	< 10.0

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Test	Specification	Result
Trace Impurities – Sodium (Na)	<= 50.0 ppb	< 5.0
Trace Impurities - Tin (Sn)	<= 50.0 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	<= 60 par/ml	1
Particle Count - 1.0 µm and greater	<= 8 par/ml	1

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



Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

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