

NMP (1-Methyl-2-pyrrolidinone)
ALEG®

Positive Photoresist Stripper



Material No.: 6397-05
Batch No.: 0000014986
Manufactured Date: 2012/08/29
Retest Date: 2017/08/28

Certificate of Analysis

Test	Specification	Result
Assay (C ₅ H ₉ NO)	>= 99.5 %	100.0
Color (APHA)	<= 20	10
Water (H ₂ O)(by Karl Fischer titrn)	<= 0.05 %	0.01
Free Amines (as CH ₃ NH ₂)	<= 50 ppm	36
Chloride (Cl)	<= 0.5 ppm	< 0.5
Phosphate (PO ₄)	<= 1 ppm	< 1
Trace Impurities – Aluminum (Al)	<= 100.0 ppb	2.0
Arsenic and Antimony (as As)	<= 100 ppb	< 10
Trace Impurities – Barium (Ba)	<= 100.0 ppb	< 0.5
Trace Impurities – Boron (B)	<= 100.0 ppb	< 2.0
Trace Impurities – Calcium (Ca)	<= 300.0 ppb	15.0
Trace Impurities – Chromium (Cr)	<= 100.0 ppb	< 1.0
Trace Impurities – Cobalt (Co)	<= 100.0 ppb	< 1.0
Trace Impurities – Copper (Cu)	<= 100.0 ppb	< 0.5
Trace Impurities – Gold (Au)	<= 100.0 ppb	< 0.5
Trace Impurities – Iron (Fe)	<= 100.0 ppb	1.0
Trace Impurities – Lead (Pb)	<= 100.0 ppb	< 3.0
Trace Impurities – Lithium (Li)	<= 100.0 ppb	< 0.5
Trace Impurities – Magnesium (Mg)	<= 100.0 ppb	0.5
Trace Impurities – Manganese (Mn)	<= 100.0 ppb	< 1.0
Trace Impurities – Nickel (Ni)	<= 100.0 ppb	< 1.0
Trace Impurities – Potassium (K)	<= 100.0 ppb	< 4.0
Trace Impurities – Silver (Ag)	<= 100.0 ppb	< 1.0
Trace Impurities – Sodium (Na)	<= 300.0 ppb	2.0

Material No.: 6397-05
Batch No.: 0000014986

Test	Specification	Result
Trace Impurities – Strontium (Sr)	<= 100.0 ppb	< 0.5
Trace Impurities – Tin (Sn)	<= 100.0 ppb	< 2.0
Trace Impurities – Titanium (Ti)	<= 100.0 ppb	< 1.0
Trace Impurities – Vanadium (V)	<= 100.0 ppb	< 0.5
Trace Impurities – Zinc (Zn)	<= 100.0 ppb	< 1.0
Particle Count – 1.0 µm and greater (Rion KS42AF)	<= 10 par/ml	6

For Microelectronic Use

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



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

A handwritten signature in white ink on a blue background, appearing to read 'Richard M Siberski'.

Richard M Siberski
Global Director of Quality Assurance

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor™ Performance Materials Inc.
3477 Corporate Parkway, Suite #200, Center Valley, PA 18034, U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610