

NMP (1-Methyl-2-pyrrolidinone)  
ALEG®

Positive Photoresist Stripper



Material No.: 6397-05  
Batch No.: 0000005888  
Manufactured Date: 2012/05/13  
Retest Date: 2017/05/12

## Certificate of Analysis

Test	Specification	Result
Assay (C <sub>5</sub> H <sub>9</sub> NO)	>= 99.5 %	100.0
Color (APHA)	<= 20	10
Water (H <sub>2</sub> O)(by Karl Fischer titm)	<= 0.05 %	0.02
Free Amines (as CH <sub>3</sub> NH <sub>2</sub> )	<= 50 ppm	26
Chloride (Cl)	<= 0.5 ppm	< 0.5
Phosphate (PO <sub>4</sub> )	<= 1 ppm	< 1
Trace Impurities –Aluminum (Al)	<= 100.0 ppb	0.5
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	3.0
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	4.0

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Test	Specification	Result
Trace Impurities – Strontium (Sr)	$\leq 100.0$ ppb	< 0.5
Trace Impurities – Tin (Sn)	$\leq 100.0$ ppb	< 2.0
Trace Impurities – Titanium (Ti)	$\leq 100.0$ ppb	< 1.0
Trace Impurities – Vanadium (V)	$\leq 100.0$ ppb	< 0.5
Trace Impurities – Zinc (Zn)	$\leq 100.0$ ppb	< 1.0
Particle Count – 1.0 $\mu$ m and greater (Rion KS 42AF)	$\leq 10$ par/ml	2

For Microelectronic Use

Storage Conditions:

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC

ISO

Phillipsburg, NJ 9001.2008, 14001.2004  
Paris, KY 9001.2008  
Mexico city, Mexico 9001.2008  
Deventer, The Netherlands 9001.2008, 14001.2004  
Selangor, Malaysia 9001.2008  
Panoli, India 9001.2008  
Gliwice, Poland 9001.2008, 17025.2005



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