

Material No.: 9403-QM Batch No.: 0000183531 Manufactured Date: 2017/02/09

Retest Date: 2022/02/08

Certificate of Analysis

Meets B.P. Chemical Specifications, Meets E.P. Chemical Specifications, Meets J.P. Chemical Specifications, Meets U.S.P Requirements, GMP Manufactured Product

Test	Specification	Result
USP – Specific Gravity at 25°/25°C	1.035 - 1.037	1.035
USP – Acidity	Passes Test	PT
JSP – Water (H2O)(by Karl Fischer titrn)	<= 0.2 %	< 0.1
JSP – Identification A (IR)	Passes Test	PT
JSP – Identification B – Diethylene Glycol	<= 0.10 %	< 0.10
JSP – Identification B – Ethylene Glycol	<= 0.10 %	< 0.10
JSP – Identification C	Passes Test	PT
JSP – Residue on Ignition	<= 0.007 %	0.004
JSP – Chloride (Cl)	<= 0.007 %	< 0.007
JSP – Sulfate (SO ₄)	<= 0.006 %	< 0.006
JSP – Heavy Metals (as Pb)	<= 5 ppm	< 5
JSP - Assay (CH₃CHOHCH2OH)	>= 99.5 %	99.6
ndotoxin Concentration (EU/g)	<= 2.5	< 2.5
P/BP – Relative Density (d ²⁰ 20)	1.035 - 1.040	1.038
P/BP - Refractive Index at 20°C	1.431 - 1.433	1.433
P/BP – Identification A	Passes Test	PT
P/BP – Identification B	Passes Test	PT
P/BP - Identification C	Passes Test	PT
P/BP – Identification D	Passes Test	PT
P/BP - Appearance	Passes Test	PT
P/BP – Acidity	Passes Test	PT
P/BP – Oxidizing Substances	Passes Test	PT
P/BP – Reducing Substances	Passes Test	PT

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Test	Specification	Result
EP/BP – Heavy Metals (as Pb)	<= 5 ppm	< 5
EP/BP – Water (H2O)	<= 0.2 %	< 0.1
EP/BP – Ash (sulfated)	<= 0.01 %	< 0.01
P - Identification A	Passes Test	PT
P – Identification B	Passes Test	PT
P - Specific Gravity at 20°/20°C	1.035 - 1.040	1.038
P – Acidity	Passes Test	PT
P – Chloride (Cl)	<= 0.007 %	< 0.007
P – Sulfate (SO ₄)	<= 0.002 %	< 0.002
P – Heavy Metals (as Pb)	<= 5 ppm	< 5
P – Arsenic (As)	<= 2 ppm	< 2
P - Glycerin	Passes Test	PT
P - Water (H ₂ O)	<= 0.5 %	< 0.1
P – Residue on Ignition	<= 0.005 %	0.001
P – Distilling Range (Lower)	184 – 189 °C	187
P – Distilling Range (Upper)	184 – 189 ℃	188
P – Ethylene Glycol	<= 0.1 %	< 0.1
P – Diethylene Glycol	<= 0.1 %	< 0.1
P – Any Other Impurity	<= 0.1 %	< 0.1
P - Total Impurities	<= 1.0 %	0.1

Bulk Pharmaceutical Chemical

CAUTION: For Manufacturing, processing or repackaging

No Class 1,2,3 or other solvents are used or produced in the manufacturing or purification of the product.

Country of Origin: US

Packaging Site: Paris Mfg Ctr & DC

Manufacturer: P0020001

Manufacturer source batch: 17DR040340



Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008
Panoli, India 9001:2008

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600 Avantor Performance Materials, LLC.