

Material No: 8066.1000  
Batch No: 2409305857  
Manufactured Date: 2024/04/02  
Retest Date: 2029/04/02

## Certificate of Analysis

Test	Specification	Result
Assay (by GC)	$\geq 99\%$	99.9
Boiling Range	$\leq 2.0^{\circ}\text{C}$	passes test
Color (APHA)	$\leq 10$	$< 10$
Density (g/ml) at 25°C	0.800-0.804	0.800
Ethanol (C <sub>2</sub> H <sub>5</sub> OH) (by GC)	$\leq 0.05\%$	$< 0.05$
Free Acid (as C <sub>2</sub> H <sub>5</sub> COOH)	$\leq 0.001\%$	$< 0.001$
Methanol (by GC) (CH <sub>3</sub> OH)	$\leq 0.05\%$	$< 0.05$
Recorded Boiling Point	97.2°C	passes test
Residue after Evaporation	$\leq 0.005\%$	$< 0.005$
Substances Darkened by H <sub>2</sub> SO <sub>4</sub>	passes test	passes test
Substances Reducing KMnO <sub>4</sub> (as O)	$\leq 0.0003\%$	$< 0.0003$
Water (H <sub>2</sub> O)	$\leq 0.1\%$	$< 0.1$
2-Propanol (C <sub>3</sub> H <sub>7</sub> OH) (by GC)	$\leq 0.05\%$	$< 0.05$
Trace Impurities (in ppm)		
Aluminium (Al)	$\leq 0.5$	$< 0.002$
Barium (Ba)	$\leq 0.1$	$< 0.002$
Boron (B)	$\leq 0.02$	$< 0.005$
Cadmium (Cd)	$\leq 0.05$	$< 0.005$
Calcium (Ca)	$\leq 0.5$	$< 0.002$
Chromium (Cr)	$\leq 0.02$	$< 0.002$
Cobalt (Co)	$\leq 0.02$	$< 0.002$
Copper (Cu)	$\leq 0.02$	$< 0.002$
Iron (Fe)	$\leq 0.1$	0.004
Lead (Pb)	$\leq 0.1$	$< 0.003$
Magnesium (Mg)	$\leq 0.1$	0.002

For questions on this Certificate of Analysis, please contact Customer Service at [avantor.emea@avantorinc.com](mailto:avantor.emea@avantorinc.com)  
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Avantor Performance Materials Poland S.A. Sowińskięo 11 Gliwice 44-101 Poland Tel:+48 322392000

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Test	Specification	Result
Manganese (Mn)	$\leq 0.02$	$< 0.002$
Nickel (Ni)	$\leq 0.02$	$< 0.002$
Tin (Sn)	$\leq 0.1$	$< 0.010$
Zinc (Zn)	$\leq 0.1$	$< 0.002$

For Laboratory, Research or Manufacturing use.

Country of Origin: UNITED STATES  
Packaging Site: Gliwice Mfg & DC



Barbara Rykowska  
Quality Assurance Coordinator

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