

Material No.: 9508-06 Batch No.: 0000256802

Manufactured Date: 2020/01/15 Retest Date: 2025/01/13

Revision No: 1

## Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (by GC, corrected for water)	>= 99.7 %	99.9
Color (APHA)	<= 10	5
Dilution Test	Passes Test	PT
Residue after Evaporation	<= 0.0010 %	< 0.0010
Acetic Anhydride ((CH <sub>3</sub> CO) <sub>2</sub> O)	<= 0.01 %	< 0.01
Chloride (Cl)	<= 1 ppm	< 1
Sulfate (SO <sub>4</sub> )	<= 1 ppm	< 1
Trace Impurities – Iron (Fe)	<= 0.20 ppm	< 0.10
Substances Reducing Dichromate	Passes Test	PT
Substances Reducing Permanganate	Passes Test	PT
Titrable Base (meq/g)	<= 0.0004	0.0003
Acetaldehyde	<= 0.005 %	< 0.005
Sensitivity	Passes Test	PT
Trace Impurities - Arsenic and Antimony (as As)	<= 50 ppb	< 5
Trace Impurities - Boron (B)	<= 100.0 ppb	< 5.0
Trace Impurities - Chromium (Cr)	<= 200.0 ppb	8.0
Trace Impurities - Cobalt (Co)	<= 100.0 ppb	< 1.0
Trace Impurities - Copper (Cu)	<= 100.0 ppb	1.0
Trace Impurities – Iron (Fe)	<= 200.0 ppb	30.0
Trace Impurities - Heavy Metals	<= 0.5 ppm	< 0.5
Trace Impurities - Lead (Pb)	<= 300.0 ppb	< 10.0
Trace Impurities – Manganese (Mn)	<= 200.0 ppb	< 1.0
Trace Impurities - Nickel (Ni)	<= 100.0 ppb	< 5.0
Trace Impurities – Potassium (K)	<= 300.0 ppb	17.0

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Test	Specification	Result
Trace Impurities - Tin (Sn)	<= 100.0 ppb	< 10.0
Trace Impurities - Titanium (Ti)	<= 300.0 ppb	< 1.0
Trace Impurities – Zinc (Zn)	<= 200.0 ppb	2.0

For Laboratory, Research or Manufacturing Use

Meets Reagent Specifications for testing USP/NF monographs

Storage Conditions: IMPORTANT: Material will freeze if stored below 17 °C (63°F).

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC

