

Product Specification

Meets ACS Reagent Chemical Requirements, Meets N.F. Requirements, GMP Manufactured Product

Test	Specification
NF – Identification	Passes Test
NF – Nonvolatile Residue	$\leq 0.02 \%$
NF – Readily Oxidizable Substances	Passes Test
NF – Assay (NH_3)(NF)	27.0 – 30.0 %
ACS – Assay (as NH_3)	28.0 – 30.0 %
ACS – Carbon Dioxide (CO_2)	$\leq 0.002 \%$
ACS – Residue after Ignition	$\leq 0.002 \%$
ACS – Substances Reducing Permanganate	Passes Test
Appearance	Passes Test
Arsenic and Antimony (as As)	$\leq 3 \text{ ppm}$
Chloride (Cl)	$\leq 0.5 \text{ ppm}$
Trace Impurities – Heavy Metals (as Pb)	$\leq 0.5 \text{ ppm}$
Nitrate (NO_3)	$\leq 2 \text{ ppm}$
Phosphate (PO_4)	$\leq 2 \text{ ppm}$
Sulfate (SO_4)	$\leq 2 \text{ ppm}$
Trace Impurities – Aluminum (Al)	$\leq 0.300 \text{ ppm}$
Trace Impurities – Boron (B)	$\leq 0.100 \text{ ppm}$
Trace Impurities – Calcium (Ca)	$\leq 0.300 \text{ ppm}$
Trace Impurities – Chromium (Cr)	$\leq 0.200 \text{ ppm}$
Trace Impurities – Copper (Cu)	$\leq 0.10 \text{ ppm}$
Trace Impurities – Gold (Au)	$\leq 0.300 \text{ ppm}$
Trace Impurities – Iron (Fe)	$\leq 0.2 \text{ ppm}$
Trace Impurities – Lead (Pb)	$\leq 0.200 \text{ ppm}$
Trace Impurities – Magnesium (Mg)	$\leq 0.300 \text{ ppm}$
Trace Impurities – Manganese (Mn)	$\leq 0.200 \text{ ppm}$
Trace Impurities – Nickel (Ni)	$\leq 0.1 \text{ ppm}$
Trace Impurities – Potassium (K)	$\leq 0.300 \text{ ppm}$
Trace Impurities – Sodium (Na)	$\leq 2.000 \text{ ppm}$

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Ammonia Solution, Strong; Ammonium Hydroxide
N.F., A.C.S.



Material No.: 3226-20

Test	Specification
Trace Impurities – Tin (Sn)	≤ 0.300 ppm
Trace Impurities – Titanium (Ti)	≤ 0.300 ppm
Trace Impurities – Zinc (Zn)	≤ 0.300 ppm

GMP Manufactured Product

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.

Elemental Impurities (USP (232), EP 5.20) – Information on elemental impurities for this product is available on the associated Product Regulatory Data Sheet and elemental impurity profile report.

Packaging Site: Phillipsburg Mfg Ctr & DC

For questions on this Product Specification please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

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