

Product Specification

Test	Specification
Appearance	Passes Test
Assay (as NH ₃)	28.0 – 30.0 %
Color (APHA)	≤ 10
Residue after Ignition	≤ 3 ppm
Carbon Dioxide (CO ₂)	≤ 10 ppm
Substances Reducing Permanganate	Passes Test
Chloride (Cl)	≤ 0.2 ppm
Nitrate (NO ₃)	≤ 0.4 ppm
Phosphate (PO ₄)	≤ 0.10 ppm
Total Sulfur (as SO ₄)	≤ 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 5.0 ppb
Trace Impurities – Calcium (Ca)	≤ 20 ppb
Trace Impurities – Chromium (Cr)	≤ 5.0 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb
Trace Impurities – Germanium (Ge)	≤ 10.0 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb
Trace Impurities – Iron (Fe)	≤ 10.0 ppb
Trace Impurities – Lead (Pb)	≤ 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb

>>> Continued on page 2 >>>

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Trace Impurities – Manganese (Mn)	≤ 5.0 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb
Trace Impurities – Nickel (Ni)	≤ 5.0 ppb
Trace Impurities – Niobium (Nb)	≤ 10.0 ppb
Trace Impurities – Potassium (K)	≤ 10.0 ppb
Trace Impurities – Silicon (Si)	≤ 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 5.0 ppb
Trace Impurities – Sodium (Na)	≤ 10.0 ppb
Trace Impurities – Strontium (Sr)	≤ 10.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb
Trace Impurities – Tin (Sn)	≤ 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb
Trace Impurities – Zinc (Zn)	≤ 10.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb
Particle Count – 0.5 µm and greater	≤ 40 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml

>>> Continued on page 3 >>>



Material No.: 5820-15

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For Microelectronic Use
Packaging Site: Phillipsburg Mfg Ctr & DC

Phillipsburg, NJ 08859

James Ethier
Jamie Ethier
Vice President Global Quality