

**PRODUCT SPECIFICATION SHEET
TRIS AMINO[®] Hydrochloride PRIME**

Main Catalog #: 601000HCL - Size Code*

*Refer to Master Price List – Individual package sizes have unique size codes

TEST	SPECIFICATION	TYPICAL RESULT
Appearance	White crystals or crystalline powder	Pass
Assay, by titration on dry basis (wt%)	NLT 99.5%	99.6%
Identification	IR matches reference	Pass
Solubility, 1M Solution in water	Clear, complete and colorless	Pass
Loss on Drying @ 110°C (wt%)	NMT 0.4%	0.3%
Moisture (wt%)	NMT 0.5%	0.3%
pH, 1.0M Aqueous Solution	3.7 – 4.7	4.2
pKa@20°C	8.0 – 8.4	8.2
UV absorption, 1.0M Aqueous Solution	NMT 0.01 at 260 nm NMT 0.01 at 280 nm	<0.01 <0.01
Melting point	150.0°C – 153.0°C	150.6°C
Heavy Metals (as Pb)	NMT 1ppm	<1ppm
Iron	NMT 1ppm	<1ppm
Residue on Ignition (wt%)	NMT 0.1%	<0.1%
Al (Aluminum)	Report Only	10ppb
As (Arsenic)	Report Only	<1ppb
Ba (Barium)	Report Only	<1ppb
Cd (Cadmium)	Report Only	1ppb
Ca (Calcium)	Report Only	65ppb
Cr (Chromium)	Report Only	5ppb
Co (Cobalt)	Report Only	<1ppb
Cu (Copper)	Report Only	2ppb
Ir (Iridium)	Report Only	<1ppb
Fe (Iron)	Report Only	25ppb
Pb (Lead)	Report Only	1ppb

TEST	SPECIFICATION	TYPICAL RESULT
Mg (Magnesium)	Report Only	5ppb
Mn (Manganese)	Report Only	1ppb
Hg (Mercury)	Report Only	1ppb
Mo (Molybdenum)	Report Only	1ppb
Ni (Nickel)	Report Only	25ppb
Os (Osmium)	Report Only	<1ppb
Rh (Rhodium)	Report Only	<1ppb
Ru (Ruthenium)	Report Only	<1ppb
V (Vanadium)	Report Only	10ppb
Zn (Zinc)	Report Only	20ppb

Form Tris HCl, Rev. 1.0, 02/18, EF

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.