

BIOSPECTRA

100 Majestic Way, Bangor, PA 18013 / www.biospectra.us

TRIS SPECIFICATION SHEET BIO EXCIPIENT GRADE / TR3220 $\text{NH}_2\text{C}(\text{CH}_2\text{OH})_3$ * F.W. 121.14 * CAS#: 77-86-1

ANALYSIS		SPECIFICATIONS
Absorbance (40%)	290 nm	0.2 a.u. maximum
Appearance and Color		White / Crystals
Assay		99.0-101.0%
Enzymes	DNase	None Detected
	Protease	None Detected
	RNase	None Detected
Heavy Metals		5 ppm maximum
Identification B		Passes Test
Identification C		Passes Test
Identification (IR)		Passes Test
Insoluble Matter		0.005% maximum
Karl Fischer Water		2.0% maximum
Loss on Drying		1.0% maximum
Melting Range		168-172 °C
pH		10.0-11.5
Residue on Ignition		0.1% maximum
Trace Metals	Arsenic (As)	5 ppm maximum
	Calcium (Ca)	5 ppm maximum
	Copper (Cu)	5 ppm maximum
	Iron (Fe)	5 ppm maximum
	Lead (Pb)	5 ppm maximum
	Magnesium (Mg)	5 ppm maximum