

# TRIS HYDROCHLORIDE

## HIGH ASSAY, LBLE, GMP

CAS #: 1185-53-1

Formula:  $\text{NH}_2\text{C}(\text{CH}_2\text{OH})_3 \cdot \text{HCl}$

F.W.: 157.60 g/mol

### THCL-4251

### BIO PHARMA GRADE

ANALYSIS		SPECIFICATIONS
Absorbance (1M)	260 nm	< = 0.06 a.u.
	280 nm	< = 0.06 a.u.
	400 nm	< = 0.01 a.u.
Appearance and Color		White Crystalline Powder to Needle-Like Crystals
Assay, Dried Basis		> = 99.0%
Microbial Content	TAMC	< 50 CFU/g
	TYMC	< 50 CFU/g
Endotoxin		< = 2.5 EU/g
Enzymes	DNase	None Detected
	RNase	None Detected
	Protease	None Detected
Identification, Chloride		Passes Test
Identification, IR		Conforms to Reference Standard
Insoluble Matter		< = 0.005%
Loss on Drying		< = 0.5%
Melting Range		147 - 152°C
pH (0.5M)		3.5 - 5.0
pH (1%)		4.0 - 5.0
Trace Metals	Arsenic (As)	< = 5 ppm
	Calcium (Ca)	< = 1 ppm
	Copper (Cu)	< = 1 ppm
	Iron (Fe)	< = 1 ppm
	Lead (Pb)	< = 1 ppm
	Magnesium (Mg)	< = 5 ppm
	Manganese (Mn)	< = 1 ppm
	Zinc (Zn)	< = 1 ppm
Water, KF		< = 1.0%

**Country of Origin: USA**

### Intended for Use in Biopharmaceutical & Biotechnological Applications and Products

This is an ultra-high purity, reagent grade of Tris Hydrochloride, purified under cGMP conditions. It is suitable for critical applications where high assay, GMP material is required. Tris Hydrochloride is considered a Good's buffer because it has a low UV absorptivity, minimum reactivity, stable pH and it is highly soluble in water.

### General Product Description

- Appears as a white crystalline product
- Manufactured in accordance with IPEC
- Manufactured in an enzyme free, hormone free and animal free environment
- Contains no known major food allergens (as defined by FDA and WHO)
- The final product and its raw materials are not derived from nor come into contact with animal parts, animal products, and/or animal byproducts or derivatives.
- Is not subject to genetic modification
- Synonyms: 2-Amino-2-(Hydroxymethyl)propane-1,3-diol; hydrochloride; Tri(Hydroxymethyl) Aminomethane Hydrochloride
- Visit the product page on our website ([www.biospectra.us](http://www.biospectra.us)) for additional information, supporting regulatory documents, and CoAs.

### Storage and Shipping Conditions

Refer to SDS.

### Standard Shelf Life Policy

Each Certificate of Analysis will contain a 2-year retest date supported by a 3-year ICH Q1 Stability Study (if one is completed).

### Package Sizes

100g, 500g, 1kg, 5kg, 10kg, 25kg, 50kg

### Standard Lead Time

2-4 weeks

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