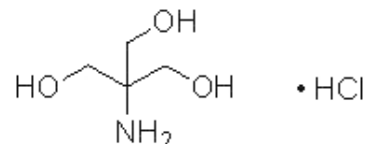


Specification Comparison

Trizma® HCl

Sigma-Aldrich® Trizma® HCl Physical Properties

Synonyms
 TRIS HCl
 TRIS hydrochloride
 Tris(hydroxymethyl)aminomethane hydrochloride



Molecular Formula	NH ₂ C(CH ₂ OH) ₃ · HCl	Beilstein Registry	3675235	Useful pH Range	7.0 - 9.0
Molecular Weight	157.60	MDL Number	MFCD00012590	pKa (at 25)	8.1
CAS Number	1185-53-1	EG/EC Number	214-684-5		

Sigma-Aldrich Trizma HCl Specifications Comparison

	T3253	T5941	T6666	93287	93363
Grade	reagent grade, ≥99.0% (redox titration), crystalline	for molecular biology, BPC , cell culture tested, ≥99.0% (titration)	BioXtra, pH 3.5 - 5.0 (20 °C, 0.5 M in H ₂ O), ≥99.0% (titration)	BioUltra, for luminescence, ≥99.0% (AT)	BioUltra, for molecular biology, ≥99.0% (AT)
Purity	≥99.0%	≥99.0%	≥99.0%	≥99.0%	≥99.0%

Reagent Testing

	T3253	T5941	T6666	93287	93363
Enhanced Quality Profile Buffers	X	X	X		
λ_{ex}				200 - 600 nm	
λ_{em}				300 - 800 nm	
260NM		≤0.06	≤0.015	≤0.12	≤0.12
280NM		≤0.06	≤0.010	≤0.08	≤0.08
290NM	≤0.05	≤0.05			
IR	X	X	X		
pH			3.5 - 5.0 (25 °C, 0.5 M in H ₂ O)	2.5 - 4.0 (25 °C, 4 M in H ₂ O)	2.5 - 4.0 (25 °C, 4 M in H ₂ O)
Karl Fischer	≤0.5%	≤0.5%			
LOD			≤0.2%	≤0.2%	≤0.2%
Insoluble Matter			filter test	filter test	filter test
Residue on Ignition			≤0.2%	≤0.2%	≤0.2%

Life Science Testing					
	T3253	T5941	T6666	93287	93363
Endotoxin		≤0.1 eu/mg			
SPC		≤100 cfu/g			
Cell test		X			
RNAse		X			X
DNase		X			X
Nickase		X			
Protease		X			X
Phosphatase					X
Suitability Electrophoresis		X			
Trace Elemental Impurities					
	T3253	T5941	T6666	93287	93363
Sodium(Na)			≤0.005%	≤0.0050%	≤0.0050%
Sulfate(SO ₄)			≤0.005%	≤0.0050%	≤0.0050%
Aluminum(Al)			≤0.0005%	≤0.0005%	≤0.0005%
Arsenic(As)			≤0.0001%	≤0.00001%	≤0.00001%
Barium(Ba)			≤0.0005%	≤0.0005%	≤0.0005%
Bismuth(Bi)			≤0.0005%	≤0.0005%	≤0.0005%
Calcium(Ca)			≤0.001%	≤0.0010%	≤0.0010%
Cadmium(Cd)			≤0.0005%	≤0.0005%	≤0.0005%
Cobalt(Co)			≤0.0005%	≤0.0005%	≤0.0005%
Chromium(Cr)			≤0.0005%	≤0.0005%	≤0.0005%
Copper(Cu)			≤0.0005%	≤0.0005%	≤0.0005%
Iron(Fe)			≤0.0005%	≤0.0005%	≤0.0005%
Potassium(K)			≤0.005%	≤0.0050%	≤0.0050%
Lithium(Li)			≤0.0005%	≤0.0005%	≤0.0005%
Magnesium(Mg)			≤0.0005%	≤0.0005%	≤0.0005%
Manganese(Mn)			≤0.0005%	≤0.0005%	≤0.0005%
Molybdenum (Mo)			≤0.0005%	≤0.0005%	≤0.0005%
Nickel(Ni)			≤0.0005%	≤0.0005%	≤0.0005%
Lead(Pb)	≤0.0005%	≤0.0005%	≤0.0005%	≤0.0005%	≤0.0005%
Strontium(Sr)			≤0.0005%	≤0.0005%	≤0.0005%
Zinc(Zn)			≤0.0005%	≤0.0005%	≤0.0005%

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