

Stock Solution



TD-S Revision 2.0

Creation Date: 8/19/2015

Revision Date: 4/10/2019

1M Bis-Tris Buffer - 1 L

Instructions

1. Dissolve 209.24 g of Bis-Tris ([Bis-Tris, GoldBio Catalog # B-020](#) [CAS 6976-37-0, mw. = 209.24 g/mol]) in 750 mL of dH₂O.
2. Adjust to desired pH using concentrated HCl.
3. Fill to final volume of 1 L with dH₂O.
4. Filter sterilize (recommended) or autoclave.
5. Store at 4°C.

To make a 1 L solution of 1M Bis-Tris, use the table below to estimate the required volume of acid for a given pH:

Starting pH: 9.90
Adjust pH with: conc. HCl

pH	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2
mL	77	76	74	72	70	67	64	61	57	53	49	44	39	35	30	26	22	18

Note: This data was collected in GoldBio labs using GoldBio reagents and calculated using 100 ml volumes. All reagent volumes recorded above were adjusted accordingly to create this protocol.

Bis-Tris pKa at 25°: 6.50
Bis-Tris pH range: 5.8 – 7.2
d(pKa)/dT value: -0.017