

Stock Solution



TD-S Revision 2.0

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1M Bicine Buffer - 1 L

Instructions

1. Dissolve 163.17 g of Bicine ([Bicine, GoldBio Catalog # B-785](#) [CAS 150-25-4, mw. = 163.17 g/mol]) in 750 mL of dH₂O.
2. Adjust to desired pH using 10N NaOH.
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 Bicine, use the table below to estimate the required volume of base for a given pH:

Starting pH: 5.30
Adjust pH with: 10N NaOH

<u>pH</u>	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
<u>mL</u>	9	11	12	17	21	26	31	36	40	46	52	58	63	69	74

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.

Bicine pKa at 25°: 8.26
Bicine pH range: 7.6 – 9.0
d(pKa)/dT value: -0.018