Polysciences, Inc.
Chemistry beyond the ordinary

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Buffers

Polysciences offers an extensive line of buffers for your research needs. These are available as liquid concentrates and powdered blends. The powdered blends are conveniently packaged in pouches. The contents of each pouch when dissolved in a liter of deionized water will yield the buffer at working concentration. Components of Phosphate and Tris buffers are also offered as separate solutions. These can be mixed to get the desired pH and then diluted to get the desired molarity.

These buffers are especially formulated for Biochemical applications, including:

- Gel Electrophoresis / Western Blotting
- Protocol for Coupling Proteins and Antibodies
- Immunoperoxidase Techniques / ELISA
- Storage Buffers for Protein Bound Microspheres
- Enzyme Digestion of DNA / Nucleic Acid Analysis and many more!

The approximate pH at 25ºC is given for each buffer. Use HCl or NaOH if necessary to get the exact pH.

Product Description	Cat. #	Size
1M Glycine-HCl Buffer, pH 2.7±0.1, 10X Concentrate *A2d* Dilute 1–>10 with deionized water to get buffer at working concentration.	24074	500ml 1L
0.5M Acetate Buffer, pH 4.6±0.2, 10X Concentrate *A2d* Dilute 1–>10 with deionized water to get buffer at working concentration.	24075	500ml 1L
0.5 Citrate-Citric Acid Buffer, pH 4.6±0.2, 10X Concentrate *A2d* Dilute 1–>10 with deionized water to get buffer at working concentration.	24076	500ml 1L
0.05M Citrate-Citric Acid Buffer, pH 4.6±0.2, 1X Powdered Blend *A2g* Dissolve the contents of each pouch in a liter of deionized water.	24077	5/pk 10/pk
0.05M Phosphate-Citrate Buffer, pH 5.0±0.2, 1X Powdered Blend *A2g* Dissolve the contents of each pouch in a liter of deionized water.	24079	5/pk 10/pk
Phosphate Buffered Saline (PBS), pH 7.4±0.2, 1X Powdered Blend *A2g* Dissolve the contents of each pouch in a liter of deionized water to get 0.01M Sodium phosphate, 0.15M Sodium chloride.	24081	5/pk 10/pk
Tris Buffered Saline (TBS), pH 8.0±0.2, 10X Concentrate *A2d* Composition: 0.5M Tris-HCl, 1.5M Sodium chloride. Dilute 1–>10 with deionized water to get buffer at working concentration.	24082	500ml 1L
Tris Buffered Saline (TBS), pH 8.0±0.2, 1X Powdered Blend *A2g* Dissolve the contents of each pouch in a liter of deionized water to get 0.05M Tris-HCl, 0.15M Sodium chloride.	24083	5/pk 10/pk

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Tris-Acetate-EDTA Buffer (TAE Buffer), pH 8.3±0.2, 10X Concentrate *A2d* Composition: 0.4M Tris-Acetate, 0.01M Disodium EDTA. Dilute 1->10 with deionized water to get buffer at working concentration. Suitable for use in gel electrophoresis for nucleic acid analysis. *J. Sambrook et al. Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Laboratory (1989), p. 6.7, B.23*	24084	1L 4x1L
Tris-Borate-EDTA Buffer (TBE Buffer), pH 8.3±0.2, 10X Concentrate *A2d* Composition: 0.445M Tris/Borate, 0.01M Disodium EDTA. Dilute 1->5 with deionized water to get buffer at working concentration. Suitable for use in gel electrophoresis for nucleic acid analysis. *J. Sambrook et al. Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Laboratory (1989), p. 6.7, B.23*	24086	500ml 1L
Tris-Borate-EDTA Buffer (TBE Buffer), pH 8.3±0.2, 1X Powdered Blend *A2g* Dissolve the contents of each pouch in a liter of deionized water to get 0.089M Tris/Borate, 0.002M Disodium EDTA.	24087	5/pk 10/pk
Tris-Glycine Buffer (TG Buffer), pH 8.3±0.2, 10X Concentrate *A2d* Composition: 0.25M Tris base, 1.92M Glycine. Dilute 1->10 with deionized water to get buffer at working concentration. Suitable for use in Polyacrylamide gel electrophoresis and Western blotting. *H.Towbin et al. Proc. Nat. Acad. Sci. USA, 75: 4350 (1979)*	24088	500ml 1L
Tris-Glycine Buffer (TG Buffer), pH 8.3±0.2, 1X Powdered Blend *A2g* Dissolve the contents of each pouch in a liter of deionized water to get 0.025M Tris base, 0.192M Glycine.	24089	5/pk 10/pk
Tris-Glycine-SDS Buffer (TGS Buffer), pH 8.3±0.2, 10X Concentrate *A2d* Composition: 0.25M Tris base, 1.92M Glycine, 1% SDS. Dilute 1->10 with deionized water to get buffer at working concentration. Suitable for use in SDS-Polyacrylamide gel electrophoresis. *U.K. Laemmli. Nature, 227: 680 (1970)*	24090	500ml 1L
Tris-Glycine-SDS Buffer (TGS Buffer), pH 8.3±0.2, 1X Powdered Blend *A2g* Dissolve the contents of each pouch in a liter of deionized water to get 0.025M Tris base, 0.192M Glycine, 0.1% SDS.	24091	5/pk 10/pk
0.5M Borate Buffer, pH 8.5±0.2, 5X Concentrate *A2d* Dilute 1->5 with deionized water to get buffer at working concentration. Suitable for use in protocols for coupling proteins to polystyrene microspheres. See Technical Data Sheet #238E	24092	500ml 1L
1M Sodium Bicarbonate-Sodium Carbonate Buffer, pH 9.6±0.2, 10X Concentrate *A2d* Dilute 1->10 with deionized water to get buffer at working concentration. Suitable for use in protocols for covalent coupling of proteins to carboxylate microspheres. See Technical Data Sheet #238C	24095	500ml 1L

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0.1M Sodium Bicarbonate-Sodium Carbonate Buffer, pH 9.6±0.2, 1X Powdered Blend *A2g* Dissolve the contents of each pouch in a liter of deionized water.	24094	5/pk 10/pk
1M Tris Base, pH 10.7±0.2 *A2d*	24098	500ml 1L
1M Tris Hydrochloride, pH 4.1±0.2 *A2d* Mix #24098 and #24099 to make 1M Tris-HCl buffer at the desired pH, then dilute with deionized water to get the desired molarity.	24099	500ml 1L
Tris Base, Chemzymes Ultra Pure™ (Tris[hydroxymethyl]aminomethane) [77-86-1] *HK3d* MW 121.14 mp 169-173° Purity: 99.9% Ultra pure Tris base, recrystallized, is the buffer of choice for a variety of biochemical applications. Tris displays optimum performance in the pH range of 7-9, which is the range in which many enzymes exhibit maximum activity. It is used in enzyme purification and assay protocols. It is also widely used as a buffer for enzyme digestion of DNA and is ideally suited for use as an electrophoresis buffer for both agarose and polyacrylamide gels used to analyze DNA fragments, RNA, and proteins. See Technical Data sheet #502 *Anal. Chem., 37, 1291 (1965)*	23483	100g 250g 500g Bulk quantities also available

Ordering Information:

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