

Buffers for Life Sciences Research

Cell Culture | Electrophoresis | Nucleic Acid and Protein Isolation



Bringing Chemistry to Life



Description	Size	Cat. No.
Buffers for Life Sciences Applications		
EDTA Ethylenediamine Tetraacetic Acid		
0.5M (pH 8.0)	100mL	BP2482-100
0.5M (pH 8.0)	500mL	BP2482-500
0.5M (pH 8.0)	1L	BP2482-1
0.5M (pH 8.0)	20L	BP2482-20
0.5M (pH 8.0), DEPC	100mL	BP2483-100
0.5M (pH 8.0), DEPC	500mL	BP2483-500
0.5M (pH 8.0), DEPC	1L	BP2483-1
Powder	500g	BP118-500
HEPES		
1.0M (pH 7.3)	100mL	BP299-100
1.0M (pH 7.3)	500mL	BP299-500
1.0M (pH 7.3)	1L	BP299-1
Crystals	100g	BP310-100
Crystals	500g	BP310-500
Crystals	1kg	BP310-1
Crystals	5kg	BP310-5
PBS Phosphate Buffered Saline		
Tablets	100 tablets	BP2944-100
1X	4L	BP2438-4
1X	20L	BP2438-20
10X	500mL	BP399-500
10X	1L	BP399-1
10X	4L	BP399-4
10X	20L	BP399-20
1X Powder Concentrate	10L	BP661-10
1X Powder Concentrate	50L	BP661-50
10X Powder Concentrate	2 x 1L	BP665-1
STE Sodium Chloride-Tris-EDTA		
1X (pH 8.0)	1L	BP2478-1
10X (pH 8.0)	1L	BP2479-1
TBS Tris-Buffered Saline		
1X (pH 7.4)	1L	BP2472-1
10X (pH 7.4)	100mL	BP2471-100
10X (pH 7.4)	1L	BP2471-1

Description	Size	Cat. No.
TE Tris-EDTA		
1X (pH 7.4)	100mL	BP2476-100
1X (pH 7.4)	500mL	BP2476-500
1X (pH 7.4)	1L	BP2476-1
1X (pH 8.0)	100mL	BP2473-100
1X (pH 8.0)	500mL	BP2473-500
1X (pH 8.0)	1L	BP2473-1
1X (pH 7.6)	100mL	BP2474-100
1X (pH 7.6)	500mL	BP2474-500
1X (pH 7.6)	1L	BP2474-1
10X (pH 7.4)	1L	BP2477-1
10X (pH 7.6)	100mL	BP2475-100
10X (pH 7.6)	500mL	BP2475-500
10X (pH 7.6)	1L	BP2475-1
100X (pH 8.0)	1L	BP1338-1
100X	1L**	BP1339-1
Tris Buffer		
0.3M	500mL	BP1761-500
2.0M	100mL	BP1759-100
2.0M	500mL	BP1759-500
Tris Hydrochloride		
1.0M (pH 7.0)	100mL	BP1756-100
1.0M (pH 7.0)	500mL	BP1756-500
1.0M (pH 7.5)	100mL	BP1757-100
1.0M (pH 7.5)	500mL	BP1757-500
1.0M (pH 8.0)	100mL	BP1758-100
1.0M (pH 8.0)	500mL	BP1758-500
Solid	500g	BP153-500
Solid	1kg	BP153-1
Tris Base		
Crystals	500g	BP152-500
Crystals	1kg	BP152-1
Crystals	5kg	BP152-5
Crystals	10kg	BP152-10
Crystals	25kg	BP152-25

** Pre-weighed powder in foil pack. Dissolve in water.

Core Life Science Solvents

Ethanol (200 Proof),

Molecular Biology Grade

Cat. No.	Size
BP2818-100	100mL
BP2818-500	500mL
BP2818-4	4L



Isopropanol,

Molecular Biology Grade

Cat. No.	Size
BP2618-500	500mL
BP2618-1	1L
BP2618-212	2.5L
BP2618-4	4L

Dimethyl Sulfoxide (DMSO)

Cell Culture Grade

Cat. No.	Size
BP231100	100mL
BP2311	1L
BP2314	4L

* Other ethanol solutions are also available.



In a biological system, buffers maintain intracellular and extracellular pH within the physiological range and resist changes in pH caused by internal and external influences.

Choose Fisher Bioreagents™ Buffers for:

- Quality:** tight specifications
- Consistency:** lot-to-lot uniformity
- Selection:** powders, concentrated stock solutions or ready-to-use liquids
- Packaging:** state-of-the-art containers designed for safety and utility
- Convenience:** pre-qualified for a variety of applications
- Economy:** configurations to meet all budgets
- Scale:** from bench to batch sizes

Fisher Bioreagents buffers meet the needs of every budget and scale.

- Economical powders come in various package sizes that allow you to make your own solutions
- Pre-weighed powders are ready for making buffers in specific pH balances and concentrations
- Concentrated stock solutions are easy and convenient dilutions
- Ready-to-use solutions are pre-made in specific pH balances and concentrations and offer the most time savings

Suitable for life sciences applications:

- Electrophoresis of nucleic acids and proteins
- Isolation and purification of biomolecules
- Cell and tissue culture
- Tested to ensure the absence of DNase, RNase, and protease

Obtaining optimal results in your research requires careful selection of reagents. When your experiments require exact buffering conditions, you can depend on the reliability of Fisher Bioreagents buffers. All Fisher Bioreagents buffers are manufactured from high-quality raw materials under ISO 9001:2015 certified manufacturing and testing processes. In addition, buffers are sterilized by 0.2µm filtration and/or autoclaving.

Description	Size	Cat. No.
Buffers for Protein Electrophoresis		
FASTRun™ Tris SDS PAGE Running Buffer		
10X	500mL	BP881-500
10X	1L	BP881-1
TG Tris-Glycine		
10X	1L	BP1306-1
10X	4L	BP1306-4
10X	1L**	BP1307-1
TGS Tris-Glycine-SDS		
10X	1L	BP1341-1
10X	4L	BP1341-4
5X	1L*	BP1398-92
10X	1L**	BP1342-1
SDS Sodium Dodecyl Sulfate		
10%	200mL	BP2436-200
10%	1L	BP2436-1
20%	200mL	BP1311-200
20%	1L	BP1311-1
Micropellets	100g	BP8200-100
Micropellets	500g	BP8200-500
Micropellets	5kg	BP8200-5
White Powder	100g	BP166-100
White Powder	500g	BP166-500
White Powder	5kg	BP166-5
Buffers for Nucleic Acid Electrophoresis		
TBE Tris-Borate-EDTA		
1X	1L	BP2430-1
1X	4L	BP2430-4
1X	20L	BP2430-20
5X	1L*	BP1396-86
10X	1L	BP1333-1
10X	4L	BP1333-4
10X	20L	BP1333-20
10X	1L**	BP1334-1
TAE Tris-Acetate-EDTA		
1X	4L	BP2434-4
1X	20L	BP2434-20
10X	500mL	BP1335-500
10X	1L	BP1335-1
10X	4L	BP1335-4
10X	20L	BP1335-20
25X	1L	BP1330-1
50X	500mL	BP1332-500
50X	1L	BP1332-1
50X	4L	BP1332-4
50X	20L	BP1332-20
25X	1L**	BP1331-1
MOPS Buffer		
Powder	100g	BP308-100
Powder	500g	BP308-500
10X Buffer Solution	500mL	BP2900-500
10X Buffer Solution	1L	BP2900-1
Buffers for Hybridization of Nucleic Acids		
SSPE Saline-Sodium Phosphate-EDTA		
20X	1L	BP1328-1
20X	4L	BP1328-4
SSC Saline-Sodium Citrate		
20X	1L	BP1325-1
20X	4L	BP1325-4
20X	20L	BP1325-20

* Pre-weighed powder in poly bottle. Dissolve in water.

** Pre-weighed powder in foil pack. Dissolve in water.

Helpful Formulas for Making Buffers with Fisher Bioreagents™ Dry Powders



$$\text{Molarity (mol/L)} = \frac{\text{moles of solute (mol)}}{\text{liters of solution (L)}}$$

$$\text{Final Solution Volume (L)} \times \text{Molarity (mol/L)} \times \text{Molar Mass (g/mol)} = \text{Grams needed for Solution (g)}$$

High-purity water is a staple solvent used in all life sciences labs, and the Fisher Bioreagents product line has water tested to the specifications that you need.

Choose the Right Water for Your Life Sciences Application:

Purity Specifications

Description	Size	Cat. No.	DEPC	Autoclaved	0.2µm Filtered	0.03µm Filtered	0.03µm Filtered	Deionized
Water, DNA Grade	1L	BP24701		X	X			
Water, Nuclease Free	100mL	BP2484100	X	X	X			
Water, Nuclease Free	50mL	BP248450	X	X	X			
Water, Biotech Grade	20L	BP248520			X			
Water, Biotech Grade	4L	BP24854			X			
Water, Molecular Biology Grade	1L	BP28191				X		X
Water, Molecular Biology Grade	10L	BP281910				X		X
Water, Molecular Biology Grade	100mL	BP2819100				X		X
Water, Molecular Biology Grade	20L	BP281920				X		X
Water, Molecular Biology Grade	4L	BP28194				X		X
Water, Microbial Cell Culture Grade	1L	BP28201		X			X	
Water, Microbial Cell Culture Grade	100mL	BP2820100		X			X	
Water, Microbial Cell Culture Grade	500mL	BP2820500		X			X	
Water, qPCR Grade	1L	BP28251					X	
Water, qPCR Grade	10L	BP282510					X	
Water, RNA Grade	1L	BP5611	X	X	X			

Activity Specifications

Description	Size	Cat. No.	Total Aerobic Microbial Count	Total Yeast & Mold Count	Endotoxin	DNase Free	RNase Free	Protease Free	Nickase Free	Human Genomic DNA	E. coli Genomic DNA
Water, DNA Grade	1L	BP24701				X		X			
Water, Nuclease Free	100mL	BP2484100				X	X	X			
Water, Nuclease Free	50mL	BP248450				X	X	X			
Water, Biotech Grade	20L	BP248520									
Water, Biotech Grade	4L	BP24854									
Water, Molecular Biology Grade	1L	BP28191				X	X	X			
Water, Molecular Biology Grade	10L	BP281910				X	X	X			
Water, Molecular Biology Grade	100mL	BP2819100				X	X	X			
Water, Molecular Biology Grade	20L	BP281920				X	X	X			
Water, Molecular Biology Grade	4L	BP28194				X	X	X			
Water, Microbial Cell Culture Grade	1L	BP28201	X	X	X						
Water, Microbial Cell Culture Grade	100mL	BP2820100	X	X	X						
Water, Microbial Cell Culture Grade	500mL	BP2820500	X	X	X						
Water, qPCR Grade	1L	BP28251	X	X	X	X	X	X	X	X	X
Water, qPCR Grade	10L	BP282510	X	X	X	X	X	X	X	X	X
Water, RNA Grade	1L	BP5611				X	X	X			



Description	Size	Cat. No.
Ammonium Phosphate Dibasic (Colorless Crystals)	500g	BP361-500
Ammonium Acetate (White Crystals)	1kg	BP326-1
	500g	BP326-500
Ammonium Sulfate	1kg	BP212-R1
	2.5kg	BP212-212
Calcium Chloride Dihydrate (White Crystals to Powder)	100g	BP510-100
	250g	BP510-250
	500g	BP510-500
Cesium Chloride (White Crystalline Powder for Molecular Biology)	100g	BP210-100
	1kg	BP210-1
	500g	BP210-500
Cesium Chloride (Crystalline Powder)	500g	BP1595-500
	1kg	BP1595-1
Potassium Phosphate Dibasic (Fine White Crystalline Powder)	1kg	BP363-1
	500g	BP363-500
Potassium Phosphate Monobasic (White Crystals)	1kg	BP362-1
	500g	BP362-500
Potassium Acetate (Colorless Crystals or Powder)	500g	BP364-500
Potassium Carbonate Anhydrous (White Granular Powder)	500g	BP365-500
Potassium Chloride (White Crystals)	1kg	BP366-1
	500g	BP366-500
Potassium Iodide (White, Free-Flowing Granules)	500g	BP367-500
Potassium Nitrate (Colorless-to-White Crystals)	500g	BP368-500
Silver Nitrate (Crystals for Molecular Biology)	100g	BP2546-100
Sodium Phosphate Monobasic Monohydrate (Colorless-to-white Crystals)	1kg	BP330-1
	500g	BP330-500
Sodium Phosphate Dibasic Heptahydrate (Colorless-to-White Crystals), Fisher Bioreagents	1kg	BP331-1
	500g	BP331-500
Sodium Phosphate Dibasic Anhydrous (White Granules or Powder)	1kg	BP332-1
	500g	BP332-500
Sodium Acetate Anhydrous (White Crystals or Granular Powder)	1kg	BP333-1
	500g	BP333-500
Sodium Acetate Trihydrate (Colorless-to-white Crystals)	1kg	BP334-1
	500g	BP334-500
Sodium Azide (White Powder)	500g	BP922I-500
Sodium Bicarbonate (Fine White Powder)	1kg	BP328-1
	500g	BP328-500
Sodium Carbonate (White Crystalline Powder)	1kg	BP357-1
Sodium Chloride	10kg	BP358-10
	1kg	BP358-1
	2.5kg	BP358-212
Sodium Citrate Dihydrate (Small, Colorless Granules)	1kg	BP327-1
	500g	BP327-500
Sodium Iodide (White Crystals for Molecular Biology)	100g	BP323-100
Sodium Nitrate (Colorless Crystals)	500g	BP360-500
Sodium Persulfate, >98% (White Crystalline Powder)	1kg	BP2637-1
Sodium Phosphate Monobasic Anhydrous (Colorless-to-White Crystals)	1kg	BP329-1
	500g	BP329-500
Sodium Pyruvate (White Powder)	100g	BP356-100
Sodium Sulfate Anhydrous (White Granules)	500g	BP354-500
Sodium Sulfite Anhydrous (White Crystals or Crystalline Powder)	500g	BP355-500
Sodium Tartrate Dihydrate (Colorless Crystals)	500g	BP352-500



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