

### pH Variation with temperature

Description	Temperature												
	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
pH 2,00 Glycine					2,000	2,101							
pH 3,00 Phthalate	2,910	2,912	2,918	2,919	2,924	2,932	2,936	2,944	2,953	2,962	2,973	2,984	2,910
pH 4,00 Phthalate	4,007	4,002	3,999	4,000	4,003	4,008	4,016	4,025	4,036	4,050	4,068	4,084	4,101
pH 5,00 Phthalate	4,998	4,980	4,969	4,958	4,955	4,955	4,957	4,963	4,974	4,989	5,006	5,028	5,052
pH 6,00 Phosphate				6,022	6,000	5,976	5,976	5,937					
pH 7,00 Phosphate	7,115	7,083	7,056	7,032	7,012	6,994	6,983	6,975	6,968	6,970	6,970	6,970	6,974
pH 8,00 Borate				8,017	8,000	7,990	7,975	7,967					
pH 9,20 Borate	9,431	9,361	9,302	9,247	9,200	9,155	9,114	9,079	9,046	9,017	8,993	8,968	8,944
pH 10,00 Carbonate	10,320	10,240	10,180	10,120	10,060	10,010	9,970		9,890		9,890		

### Available from Fisher Chemical

pH	Standard Buffer Solutions	Colour Coded Buffer Solutions	BS Formulated Buffer Solutions	Standard Concentrated Buffer Solutions	Concentrated Colour Coded	Buffer Tablets	Buffer Capsules
	READY TO USE			CONCENTRATED			
pH 2,00	J/2800/			J/2800C/			
pH 3,00	J/2810/						
pH 4,00	J/2820/	J/2825/	J/2821/	J/2820C/	J/2825C/	B/4760/	PHJ-830-010X
pH 5,00	J/2830/						
pH 6,00	J/2840/						
pH 6,87			J/2845/				
pH 7,00	J/2850/	J/2855/		J/2850C/	J/2855C/	B/4765/	PHJ-830-020L
pH 8,00	J/2860/			J/2860C/			
pH 9,00	J/2865/						PHJ-830-030Y
pH 9,20	J/2870/			J/2870C/		B/4770/	
pH 9,23			J/2871/				
pH 10,00	J/2880/	J/2885/		J/2880C/	J/2885C/		PHJ-830-050C

### Colour Coded Buffer Solutions packed in HDPE containers



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**Buffers**  
 Traceable to NIST



# Buffers

Our Buffer solutions are a high quality and reliable range of products that ensure accurate results. Customers can have full confidence in the quality of the buffers and the accuracy of their calibration/titration.

Standard and Colour Coded Buffer Solutions traceable to NIST.

- Manufactured to a tolerance of  $\pm 0.02$  pH units
- Accurately standardised and labelled with lot specific pH at 20°C
- All buffers are traceable to NIST and BS: 1647 standard
- Packed in HDPE containers to help protect the products integrity and ensure safe handling (refers to 1L, 2.5L and 5L quantities)
- Standard buffers are available over the range pH 2,00 to 10,00
- Colour coded buffer solutions are available over the range pH 4,00, pH 7,00 and pH 10,00

Standard Buffer Solutions			
Description	Pack size	Code	
pH 2,00 (Glycine)	500ml	J/2800/08	
	1L	J/2800/15	
	2.5L	J/2800/17	
pH 3,00 (phthalate)	500ml	J/2810/08	
	1L	J/2810/15	
	2.5L	J/2810/17	
pH 4,00 (phthalate)	500ml	J/2820/08	
	1L	J/2820/15	
	2.5L	J/2820/17	
	5L	J/2820/21	
	10L	J/2820/24	
pH 5,00 (phthalate)	500ml	J/2830/08	
	1L	J/2830/15	
	2.5L	J/2830/17	
pH 6,00 (phosphate)	500ml	J/2840/08	
	1L	J/2840/15	
	2.5L	J/2840/17	
	10L	J/2840/24	
pH 7,00 (phosphate)	500ml	J/2850/08	
	1L	J/2850/15	
	2.5L	J/2850/17	
	10L	J/2850/24	
pH 8,00 (Borate)	500ml	J/2860/08	
	1L	J/2860/15	
	2.5L	J/2860/17	
	10L	J/2860/24	
pH 9,00 (Borate)	2.5L	J/2865/17	
	pH 9,20 (Borate)	500ml	J/2870/08
		1L	J/2870/15
		2.5L	J/2870/17
		10L	J/2870/24
pH 10,00 (Borate)	500ml	J/2880/08	
	1L	J/2880/15	
	2.5L	J/2880/17	
	5L	J/2880/21	

• pH 2,00 - 7,00 are stabilised with 10 ppm Mercury (II) chloride  
 • 10L packs are box construction with plastic liner  
 • Ready to use

Colour Coded Buffer Solutions		
Description	Pack size	Code
pH 4,00 (phthalate) (red)	500ml	J/2825/08
	1L	J/2825/15
	2.5L	J/2825/17
	5L	J/2825/21
	10L	J/2825/24
pH 7,00 (phosphate) (yellow)	500ml	J/2855/08
	1L	J/2855/15
	2.5L	J/2855/17
	5L	J/2855/21
	10L	J/2855/24
pH 10,00 (Borate) (blue)	500ml	J/2885/08
	1L	J/2885/15
	2.5L	J/2885/17
	5L	J/2885/21
	10L	J/2885/24

BS* formulated buffer solutions		
Description	Pack size	Code
pH 4,00	1L	J/2821/15
pH 6,87	1L	J/2845/15
pH 9,23	1L	J/2871/15

• Stabilised with 10 ppm of Mercury (II) chloride

\* according British Standard

Also available from Fisher Chemical:

- Concentrated Buffer Solutions, Buffer tablets end capsules
- Manufactured to the highest quality standard
- Easy to use tablets and ampoules



Concentrated Buffer Solutions		
Description	Code	
	1 Ampoule	6 Ampoules
<b>Standard</b>		
pH 2,00 (glycine)	J/2800C/05	J/2800C/90
pH 4,00 (phthalate)	J/2820C/05	J/2820C/90
pH 7,00 (phosphate)	J/2850C/05	J/2850C/90
pH 8,00 (Borate)	J/2860C/05	J/2860C/90
pH 9,20 (Borate)	J/2870C/05	J/2870C/90
pH 10,00 (Borate)	J/2880C/05	J/2880C/90
<b>Colour Coded</b>		
pH 4,00 (phthalate) (red)	J/2825C/05	J/2825C/90
pH 7,00 (phosphate) (yellow)	J/2855C/05	J/2855C/90
pH 10,00 (Borate) (blue)	J/2885C/05	J/2885C/90

• Each ampoule makes 500 ml of buffer  
 • Stabilised with 10 ppm of Mercury (II) chloride, except J/2885C

Buffer tablets	
Description	Code
pH 4,00 (phthalate)	B/4760/77
pH 7,00 (phosphate)	B/4765/77
pH 9,20 (Borate)	B/4770/77

• Pack quantity = 50 tabs  
 • Make-up volume = 100 ml/tab

Buffer capsules	
Description	Code
pH 4,00	PHJ-830-010X
pH 7,00	PHJ-830-020L
pH 9,00	PHJ-830-030Y
pH 10,00	PHJ-830-050C

• Pack quantity = 50 capsules  
 • Make-up volume = 100 ml/capsule

QUALITY RELIABILITY SUSTAINABILITY AND EXPERTISE

