



# SMARTBUFFERS

## Phosphate Buffered Saline (PBS) pH 7.4 and 7.2



### Features

- Formulated from analytical grade reagents
- Autoclavable
- Choice of two compositions: with or without potassium
- Available as convenient tablets or powder mix in pouches
- Ready to use in minutes

### Product description

Among biological buffers PBS is one of the most commonly used. The buffer is isotonic and non-toxic to cells and has the ability to maintain their osmolarity. Thereby the buffer is suitable for washing procedures in cell cultures and for immunoassays such as ELISA and immuno-histochemical procedures. It is often used for sample dilution in molecular biology, as protein diluent in Western blotting and in protein purification procedures.

Medicago's PBS is specifically developed for immunological and microbiological laboratories. It is provided as pre-weighed tablets in containers and in convenient blister packs, or as pre-weighed powder mix in sealed pouches. There are seventeen standard-sized packages and final volumes range from 100 ml to 100 litres. Choose from different pH, 7.2 and 7.4 and from PBS with or without potassium. PBS without potassium is available in two different molar strengths, 0.01 M and 0.02 M.

### Applications

- Immunoassays
- Immuno-histochemical procedures
- Microbiological procedures
- Tissue and cell culture procedures
- Sample dilution

### Directions for use

Empty one pouch or deposit one tablet in a laboratory flask or beaker placed on a magnetic stirrer. Add 50 ml to 500 ml of deionized water and stir for a couple of minutes. Adjust the volume up to the given, stir until full dissolution and the buffer is ready to use. For larger quantities, 10 to 100 litres, use suitable equipment to dissolve the buffer in compliance with the instructions above.

### Shipping and storage

PBS buffer is shipped at room temperature. Store the tablets and pouches in a dry place at room temperature. Shelf life is three years. Medicago's ready-to-use PBS solution in bottles is stable for one year at +4°C.

### Tips and hints

If the tablet or the contents of the pouch is not properly dissolved, make sure:

- the water temperature is 22-25°C
- the buffer solution is properly stirred
- high quality deionized water is used

Sterilization can be performed by filtration or autoclaving. Filter the buffer into a sterile flask through a 0.22 µm filter or autoclave for 15 to 20 minutes at 121°C and then keep at +4°C.

### Certifications

Medicago's laboratories and manufacturing site in Uppsala is ISO 9001:2015 certified. Each stage of the manufacturing process is controlled and monitored by stringent quality control procedures to guarantee the highest possible quality and lot-to-lot reproducibility.



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## Specifications

	PBS pH 7.4	PBS pH 7.2	PBS without Potassium
Chemicals	Analytical grade	Analytical grade	Analytical grade
Format	Exactly pre-weighed tablets/powder mix	Exactly pre-weighed tablets/powder mix	Exactly pre-weighed tablets
Composition	0.14 M NaCl 0.0027 M KCl 0.010 M PO <sub>4</sub> <sup>3-</sup>	0.14 M NaCl 0.0027 M KCl 0.010 M PO <sub>4</sub> <sup>3-</sup>	1. 0.14 M NaCl, 0.010 M PO <sub>4</sub> <sup>3-</sup> 2. 0.15 M NaCl, 0.020 M PO <sub>4</sub> <sup>3-</sup>
Volume	100 ml, 200 ml, 500 ml, 1000 ml, 10 l, 25 l, 50 l and 100 l	1000 ml	1000 ml
pH	7.4 ± 0.05 at 25°C *	7.2 ± 0.05 at 25°C	7.4 ± 0.05 at 25°C
Shelf life	Three years after production date	Three years after production date	Three years after production date

\*PBS 10x (12-9423-5) gives pH 7.4 when 1x dilute and pH 6.8 when 10x dilute.

## Ordering information

Article no.	Product name	Pack size	Solution vol.
09-2051-100	PBS tablets pH 7.4	100 tablets	100 ml/tablet
09-2052-100	PBS tablets pH 7.4	100 tablets	200 ml/tablet
09-8912-100	PBS tablets pH 7.4	100 tablets	500 ml/tablet
09-8912-12	PBS tablets pH 7.4	12 tablets*	500 ml/tablet
09-9400-100	PBS tablets pH 7.4	100 tablets	1000 ml/tablet
09-9400-10	PBS tablets pH 7.4	10 tablets*	1000 ml/tablet
09-9499-100	PBS tablets pH 7.2	100 tablets	1000 ml/tablet
09-9499-10	PBS tablets pH 7.2	10 tablets*	1000 ml/tablet
12-9423-5	PBS 10x pouches pH 7.4	5 pouches	1000 ml/pouch
12-9424-1	PBS pouches pH 7.4	1 pouch	10 l/pouch
12-9422-1	PBS pouches pH 7.4	1 pouch	25 l/pouch
12-9425-1	PBS pouches pH 7.4	1 pouch	50 l/pouch
12-9426-1	PBS pouches pH 7.4	1 pouch	100 l/pouch
10-9402-10	PBS solution pH 7.4	10 bottles	1000 ml/bottle
09-9420-100	PBS without potassium pH 7.4	100 tablets	1000 ml/tablet
09-9420-10	PBS without potassium pH 7.4	10 tablets*	1000 ml/tablet
09-9500-100	PBS without potassium pH 7.4 high strength 0.020 M phosphate	100 tablets	1000 ml/tablet

\*Blister pack

## References

1. A peptide carrier for the delivery of biologically active proteins into mammalian cells. (2001) MC Morris, J Depollier, J Mery, F Heitz. Nature Biotechnology 19, 1173 - 1176.