

# 4% Paraformaldehyde

Product	Con.	Cat#	Size
4% Paraformaldehyde	1X	IBS-BP031	1 L
	1X	IBS-BP031a	500ml

**Components :** 4% Paraformaldehyde in 1X PBS  
pH 7.0 ~ 7.6

**Storage Conditions :** Cold

**Introduction :** Paraformaldehyde is essentially a solid form of formaldehyde and therefore has the same uses as formaldehyde. For example paraformaldehyde reacts with either phenol, urea, melamine or resorcinol to produce resins used as binders in plywood and particleboard. Use of paraformaldehyde in resin production offers two major advantages as compared with aqueous formaldehyde: (1) more production from existing equipment and (2) less water (typically twenty fold less) to be removed from the reactor product.

**Use :** Paraformaldehyde is used as fumigant, disinfectant, fungicide, and fixative, and for the preparation of pure formaldehyde. Longer chain-length (high molecular weight) polyoxymethylenes are used as thermoplastic and are known as polyoxymethylene plastic. It was used in the past in the discredited Sargenti method of root canal treatment.

In cell culture, a typical paraformaldehyde fixing procedure would involve using a 4% paraformaldehyde solution in phosphate buffered saline (PBS) on ice for 10 minutes, followed by a PBS wash, after which an 8% paraformaldehyde solution is applied to the cells for a further 10 minutes

**Toxicity :** As a formaldehyde releasing agent, paraformaldehyde is a suspected carcinogen.

\* We recommend that Paraformaldehyde solutions are used no longer than 3 months after they were initially mixed. Aliquot and freeze at -20°C for long-term storage