

## Technical Information

### Paraformaldehyde Solution, 4% 4% Paraformaldehyde in Phosphate Buffered Saline

#### Product Code: TCL1119

##### Application:-

Paraformaldehyde is the most commonly used fixative employed for fixation of tissues and cells in immunohistochemistry and immunocytochemistry protocols. When dissolved in solution, it gets depolymerised to formaldehyde which fixes the tissues and cellulose antigens while retaining cellular and subcellular structure.

Formaldehyde acts by crosslinking the proteins, primarily the residues of the basic amino acid, lysine resulting in formation of methylene bridges. It is especially effective at preserving secondary structure of proteins as well as tertiary structure. The purpose of fixation is to preserve the biological sample (tissues or cells) as close to its natural form as possible. Fixation is usually the first step in the procedure of immunohistochemistry and immunocytochemistry.

TCL1119 is a 4% solution of Paraformaldehyde in Phosphate buffered saline.

#### Methodology

##### For Immunohistochemistry:

Add 1-4 mm thick specimen in 15-20 times volume of 4% PFA and incubate at the rate of 1 hr per 1 mm of tissue.

##### For Immunocytochemistry:

Cover the monolayer of cells grown with a sufficient volume of 4% PFA. Incubate for 15-20 mins at room temperature or overnight at 4°C.

#### Quality control

##### Appearance

Colorless, clear solution

##### pH

6.50 -7.50

##### Osmolality in mOsm/Kg H<sub>2</sub>O

1450.00 -1650.00

##### Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

##### Cultural Response

No lysis of cells in 24 - 48 hours

#### Storage and Shelf Life

Store at 15-30°C away from bright light.

Shelf life is 24 months.

Use before expiry date given on the product label.

### Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
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