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3.7% Paraformaldehyde solution

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Works for me

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ABSTRACT

Protocol for preparing a 3.7% Paraformaldehyde (PFA) solution. 3.7% PFA solution can be used to fix tissues.

MATERIALS

NAME ▾

CATALOG # ▾

VENDOR ▾

Paraformaldehyde powder

DPBS

NaOH

HCl

MATERIALS TEXT

Equipment:

- Hot plate with a magnetic stirrer
- Thermometer
- Glassware

SAFETY WARNINGS

Formaldehyde is toxic. Please refer to the SDS (Safety Data Sheet) for detailed safety warnings and hazard information.

BEFORE STARTING



Formaldehyde is toxic. Please be sure to work under a ventilated fume hood and wear gloves and safety glasses.

- 1 For **1 L 3.7% Formaldehyde** , add **800 ml 1X DPBS** to a glass beaker on a stir plate.



Be sure to work under a ventilated fume hood.

- 2 Heat while stirring to approximately **55 °C** .

3 Add  **37 g paraformaldehyde powder** to the heated DPBS solution.

4 

Keep stirring until all PFA powder is dissolved.





Take care that the solution does not boil to prevent formic acid formation.



For better dissolubility of PFA, you can add NaOH -- one drop at the time.

5 

Once all PFA powder is dissolved, adjust the pH to  **pH7.4** using HCl.

6 Add DPBS subsequently until the total volume of  **1 L** is reached.

7 Transfer the solution into tubes of the desired proportions and store at  **-20 °C** until use.



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