

## 1M MOPS Solution

<u>Product Name</u>	<u>Product Code</u>	<u>Kit Packing</u>
1M MOPS Solution	ML102-100ML ML102-500ML	100 ml 500 ml

**Introduction:** MOPS is a zwitterionic buffer which was developed by Good et al., 1966. It is structurally analogous to MES and its metal binding capacity is negligible. As the  $pK_a$  value of MOPS is 7.20 it is an excellent buffer for many biological systems at near-neutral pH.

**Description:** MOPS is a morpholino propanesulfonic acid, a structural analog to MES, the ethanesulfonic acid (first introduced by Good et al.) Both series of buffers were developed to meet the following criteria: midrange  $pK_a$ , maximum water solubility and minimum solubility in all other solvents, minimal salt effects, minimal change in  $pK_a$  with temperature chemically and enzymatically stable, minimal absorption in visible or UV spectral range, and reasonably easily synthesized.  $pK_a=7.2$  at 25°C.

**Application:** MOPS is extensively used as a buffering agent in molecular biology and biochemistry. It has been tested and recommended for use in polyacrylamide gel electrophoresis. MOPS can be used in many bioanalytical methods like isoelectric focusing, protein assays and in X-ray crystallographic studies. MOPS can also be used as an electrophoresis buffer for agarose gel electrophoresis of RNA.

**Composition:** 1M MOPS Solution is made from extra pure molecular biology grade MOPS and aseptically filtered.

### Properties:

Appearance	: Colorless solution
Clarity	: Clear and free of particles
pH	: 7.4 - 7.6
DNase	: None detected
Bioburden	: None detected
Suitability Test	: This reagent has been tested and is suitable for use in various molecular biology applications

**Storage conditions:** 1M MOPS Solution has to be stored at 15 - 25°C.

### Technical Assistance

At HiMedia we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance, mail at [mb@himedialabs.com](mailto:mb@himedialabs.com).

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