

MOPS, Free Acid

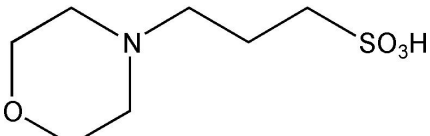
Product Information

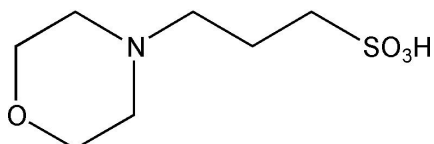
Product name	Cat#	Size
MOPS, Free Acid	60104ES25	25 g
	60104ES60	100 g

Product Description

3-(N-morpholino)propanesulfonic Acid, abbreviated as MOPS, is a zwitterionic buffer commonly used in biochemistry and molecular biology, and its structure is similar to 2-(N-morpholino)ethanesulfonic acid (MES). The effective pH buffer range of MOPS is 6.5-7.9, pKa=7.2 (25°C), and its pKa is closer to the physiological pH 7.4 than MES (pKa=6.1), so it is more suitable for use as a physiologically relevant buffer. For example, it is used for mammalian cell culture (concentration should be ≤ 20 mM), RNA denaturing agarose gel electrophoresis experiment (20 mM concentration is better for formaldehyde gel), discontinuous polyacrylamide gel electrophoresis, etc.

Product Nature

Synonym	3-(N- morpholino) propanesulfonic acid
CAS NO.	1132-61-2
Formula	C ₇ H ₁₅ NO ₄ S
Molecular Weight	209.26 g/mol
Melting Point	277-280 °C
Useful Buffering Range	pH 6.5-7.9 (25 °C)
Appearance	White crystal powder
Purity	>99%
Solubility	Easily soluble in water (1 M), a transparent colorless solution
Structure	



Shipping and Storage Methods

The product is transported and stored at room temperature and is valid for 1 years. On standing, the bulk powder may clump together and form hard lumps without affecting its chemical properties.

The MOPS solution can be stored at 2-8°C for at least 6 months. Filter sterilize with a 0.2 μ m filter. Autoclaving is not recommended. To prepare a nuclease-free MOPS solution, autoclave the water before adding the powder to dissolve.

Cautions

- 1) For your safety and health, please wear lab coats and disposable gloves for operation.
- 2) For research use only!