

## MOPS BIOTECH, GMP BIO PHARMA GRADE / MOPS-4221

C<sub>7</sub>H<sub>15</sub>NO<sub>4</sub>S ✦ F.W. 209.26 g/mol ✦ CAS# 1132-61-2

### Intended for Use in Biopharmaceutical & Biotechnological Applications and Products

MOPS Biotech is a high purity, GMP Reagent Grade. MOPS is a zwitterionic buffer used as a running buffer for denaturing gel electrophoresis and as a buffering agent in many biological and biochemical applications. MOPS can be used a Good's buffer because it has low UV absorptivity, minimal reactivity, stable pH and is soluble in water.

### SPECIFICATIONS

ANALYSIS		SPECIFICATIONS
Enzymes	DNase	None Detected
	RNase	None Detected
	Protease	None Detected
Trace Metals	Aluminum (Al)	≤ 5 ppm
	Arsenic (As)	≤ 5 ppm
	Bismuth (Bi)	≤ 5 ppm
	Calcium (Ca)	≤ 5 ppm
	Chromium (Cr)	≤ 5 ppm
	Copper (Cu)	≤ 5 ppm
	Iron (Fe)	≤ 5 ppm
	Lead (Pb)	≤ 5 ppm
	Lithium (Li)	≤ 5 ppm
	Magnesium (Mg)	≤ 5 ppm
	Molybdenum (Mo)	≤ 5 ppm
Nickel (Ni)	≤ 5 ppm	
Appearance and Color		White / Crystals
Assay		≥ 99.5%
Chloride		≤ 50 ppm
Absorbance (0.1M)	250 nm	≤ 0.020 a.u.
	260 nm	≤ 0.020 a.u.
	280 nm	≤ 0.020 a.u.
Identification, IR		Conforms to Reference Standard
Water, KF		≤ 0.1%
Loss on Drying		≤ 1.0%

pH (1% Solution)	3.0 – 4.5
pH (2.5M)	2.5 – 4.5
pK <sub>a</sub>	7.0 – 7.5
Residue on Ignition	≤ 0.1%
Solubility (5%)	Passes Test
Sulfate	≤ 50 ppm

### General Product Description:

Molecular Formula: C<sub>7</sub>H<sub>15</sub>NO<sub>4</sub>S

Molecular Weight: 209.26 g/mol

CAS Number: 1132-61-2

### MOPS Biotech:

- Appears as a White Crystalline product
- Is manufactured under an ICH-Q7 Quality Managed cGMP System
- Manufactured in an enzyme free, hormone free and animal free environment
- Has no known major food allergens (as defined by FDA and WHO)
- The final product nor its raw materials are not derived from nor come into contact with animals, animal parts, animal products, and/or animal byproducts or derivatives.
- Is not subject to genetic modification
- Synonyms: 3-(N-Morpholino) propane

### Shelf Life Policy:

Three-year expiry from the date of manufacture.

### Storage and Shipping Conditions:

Please refer to the SDS for storage and shipping conditions.

### Package Size:

100g, 500g, 1kg, 5kg, 10kg, 25kg, 50kg