

## MES HYDRATE

BIOBURDEN TESTED, GMP

CAS #: 1266615-59-1

Formula:  $C_6H_{13}NO_4S \cdot H_2O$

F.W.: 195.24 g/mol

**MESH-4250**

**BIO PHARMA GRADE**

ANALYSIS		SPECIFICATIONS
Absorbance (0.1M)	260 nm	< = 0.04 a.u.
	280 nm	< = 0.02 a.u.
Appearance		White Powder
Assay, Anhydrous Basis		> = 99.5%
Cytotoxicity (50%)		Passes Test
Enzymes	DNase, Exonuclease	None Detected
	NICKase	None Detected
	RNase	None Detected
	Protease	None Detected
Identification, IR		Conforms to Reference Standard
pH (1%)		3.5 – 4.1
Solubility (0.1M)		Clear and Colorless
Microbial Content	TAMC	< = 100 CFU/g
	TYMC	< = 100 CFU/g
Trace Metals	Aluminum (Al)	< = 5 ppm
	Antimony (Sb)	< = 5 ppm
	Arsenic (As)	< = 3 ppm
	Barium (Ba)	< = 5 ppm
	Bismuth (Bi)	< = 5 ppm
	Cadmium (Cd)	< = 5 ppm
	Calcium (Ca)	< = 20 ppm
	Chromium (Cr)	< = 5 ppm
	Cobalt (Co)	< = 5 ppm
	Copper (Cu)	< = 5 ppm
	Iron (Fe)	< = 5 ppm
	Lead (Pb)	< = 5 ppm
	Lithium (Li)	< = 5 ppm
	Manganese (Mn)	< = 5 ppm
	Magnesium (Mg)	< = 5 ppm
	Molybdenum (Mo)	< = 5 ppm
	Nickel (Ni)	< = 5 ppm
	Sodium (Na)	< = 20 ppm
	Zinc (Zn)	< = 5 ppm
Water, KF		5.0 – 8.9%

**Country of Origin: USA**

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

This is a high purity, reagent grade product, purified under full cGMP conditions. MES Hydrate is a zwitterionic buffer that is not absorbed through cell membranes and is virtually transparent in UV light. MES is a buffering agent used in many biopharmaceutical and biotechnological applications. The characteristics of low UV absorptivity, minimal reactivity, stable pH and solubility in water allow MES Hydrate to be used as a Good's buffer.

### General Product Description

- Appears as a white crystalline product
- Manufactured under an IPEC Quality Managed cGMP System
- Manufactured in an enzyme free, hormone free and animal free environment
- No known major food allergens (as defined by FDA and WHO)
- The final product and its raw materials are not derived from nor come into contact with animal parts, animal products, and/or animal byproducts/derivatives.
- Is not subject to genetic modification
- Synonyms: 2-(N-Morpholino) ethane sulfonic acid, 4-Morpholineethanesulfonic acid monohydrate
- Visit the product page on our website ([www.biospectra.us](http://www.biospectra.us)) for additional information, supporting regulatory documents, and CofAs.

### Storage and Shipping Conditions

Refer to SDS.

### Standard Shelf Life Policy

Each Certificate of Analysis will contain a 2-year retest/recertification date supported by a 3-year ICH Q1 Stability Study (if one is completed).

### Package Sizes

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

### Standard Lead Time

1-2 weeks

*This is not considered a controlled document. We are not responsible for any errors or omissions.*