

MES HYDRATE

BIOTECH, LBLE, 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		$\geq 99.5\%$
Cytotoxicity (50% concentration)		Passes Test
Enzymes	DNase, Exonuclease	Passes Test
	NICKase, Endonuclease	Passes Test
	RNase	Passes Test
	Protease	Passes Test
Identification, IR		Conforms to Reference Standard
pH (1% solution)		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, GMP, 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 ICH-Q7 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) 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