

MES HYDRATE

BIOBURDEN TESTED, GMP

CAS #: 1266615-59-1

 Formula: $C_6H_{13}NO_4S \cdot xH_2O$

F.W.: 195.24 g/mol (anhydrous basis)

MESH-4250

BIO PHARMA GRADE

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

General Product Overview

This is a high purity, reagent grade product, purified under 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 it to be a Good's buffer.

Industry Application

Suitable for use in biological and biotech chemical process applications from R&D through scale cGMP production.

Key Product Features

- Appears as white powder
- Manufactured in accordance with IPEC
- Manufactured in an enzyme free, hormone free and animal free environment
- Contains 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 or derivatives.
- Is not subject to genetic modification
- Synonyms: 2-(N-Morpholino) ethanesulfonic Acid, 4-Morpholineethanesulfonic Acid Hydrate

Storage and Shipping Conditions

Refer to SDS.

Standard Shelf Life Policy

Unless otherwise noted on the Shelf-Life Statement and CoA, this product has a 2-year retest date supported by a 3-year ICH Q1 Stability Study (if one is completed).

Package Sizes

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

[Click here to view SDS, CoAs and other supporting regulatory documents on our website.](#)

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