

MES HYDRATE

BET*, GMP

CAS #: 1266615-59-1

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

F.W.: 195.24 g/mol

MESH-3250

BIO EXCIPIENT 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
Endotoxin		< = 50 EU/g
Enzymes	DNase, Exonuclease	None Detected
	NICKase	None Detected
	RNase	None Detected
	Protease	None Detected
Identification, IR		Conforms to Reference Standard
pH (1.0%)		3.5 – 4.1
Solubility (0.1M)		Clear and Colorless
Microbial Content	TAMC	< = 100 CFU/g
	TYMC	< = 100 CFU/g
Trace Metals	Aluminum (Al)	< = 5.0 ppm
	Antimony (Sb)	< = 5.0 ppm
	Arsenic (As)	< = 3.0 ppm
	Barium (Ba)	< = 5.0 ppm
	Bismuth (Bi)	< = 5.0 ppm
	Cadmium (Cd)	< = 5.0 ppm
	Calcium (Ca)	< = 20.0 ppm
	Chromium (Cr)	< = 5.0 ppm
	Cobalt (Co)	< = 5.0 ppm
	Copper (Cu)	< = 5.0 ppm
	Iron (Fe)	< = 5.0 ppm
	Lead (Pb)	< = 5.0 ppm
	Lithium (Li)	< = 5.0 ppm
	Manganese (Mn)	< = 5.0 ppm
	Magnesium (Mg)	< = 5.0 ppm
	Molybdenum (Mo)	< = 5.0 ppm
	Nickel (Ni)	< = 5.0 ppm
	Sodium (Na)	< = 20.0 ppm
	Zinc (Zn)	< = 5.0 ppm
Water, KF		5.0 – 8.9%

General Product Overview

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 biological and biochemical applications. It is also used as a running buffer for denaturing gel electrophoresis. The characteristics of low UV absorptivity, minimal reactivity, stable pH and solubility in water allow MES Hydrate to be a Good's buffer.

Industry Application

Suitable for use as a cGMP chemical in pharmaceutical manufacturing processes and products.

Key Product Features

- The manufacturing of MES Hydrate, MESH-3250 is performed at BioSpectra's Bangor, PA facility.
- Appears as a white powder
- Manufactured in accordance with ICH Q7
- 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: 4-Morpholineethanesulfonic Acid Hydrate; 2-(N-Morpholino) ethanesulfonic Acid

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

10kg, 25kg and 50kg pails

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

*Bioburden and Endotoxin Tested

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