

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	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%

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 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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