

MES MONOHYDRATE

GMP

CAS #: 145224-94-8

 Formula: $C_6H_{13}NO_4S\ H_2O$

F.W.: 213.25 g/mol

MESM-4221

BIO PHARMA GRADE

ANALYSIS	SPECIFICATIONS
Absorbance (1M)	260 nm < = 0.1000 a.u. 280 nm < = 0.1000 a.u.
Appearance and Color	White Crystals
Assay	> = 99.0%
Chloride	< = 50 ppm
Color (1M, Alkaline)	Colorless
Enzymes	DNase None Detected RNase None Detected Protease None Detected
Identification, IR	Conforms to Reference Standard
Loss on Drying, 130°C	7 – 10%
pH (5%)	3.1 – 3.5
pH (0.5M)	2.5 – 4.5
pKa	5.9 – 6.3
Residue on Ignition	< = 0.05%
Sulfate	< = 50 ppm
Trace Metals	Arsenic (As) < = 2 ppm Calcium (Ca) < = 50 ppm Cadmium (Cd) < = 5 ppm Cobalt (Co) < = 5 ppm Copper (Cu) < = 2 ppm Chromium (Cr) < = 5 ppm Iron (Fe) < = 2 ppm Lead (Pb) < = 2 ppm Magnesium (Mg) < = 5 ppm Manganese (Mn) < = 5 ppm Nickel (Ni) < = 5 ppm Potassium (K) < = 50 ppm Sodium (Na) < = 50 ppm Zinc (Zn) < = 5 ppm

General Product Overview

This is a high purity, reagent grade product, purified under cGMP conditions. MES Monohydrate 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 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 crystals
- 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/derivatives.
- Is not subject to genetic modification
- Synonyms: 2-(N-Morpholino) Ethane Sulfonic Acid; 4-Morpholineethanesulfonic Acid Monohydrate

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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