

Excipient ICH-Q7 GMP Manufactured Product

MES, Hydrate, LBLE, GMP Excipient Grade

Low Bioburden, Low Endotoxin, GMP Manufactured

INTENDED FOR USE AS AN EXCIPIENT

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 Excipient to be used as a Good's buffer.

Lead Time (If No Stock): 3-6 months Minimum Order Quantity: 250kg

BIO EXCIPIENT GRADE | Product Code: MESH-3250

C₆H₁₃NO₄S·H₂O · F.W. 195.25 g/mol. · CAS# 1266615-59-1

These are general specifications. BioSpectra will customize our products to meet your quality based requirements.

ANALYSIS	SPECIFICATIONS
Absorbance (0.1M) in Water A26 A28	
Appearance	White Powder
Assay (anhydrous basis)	≥ 99.5%
Cytotoxicity	Passes Test
Endotoxin	< 50 EU/g
Enzymes Directio Enzymes Directio DNase, Exonuclease Detectio RNase Detectio Protease Detectio	n Passes Test n Passes Test
Identification (IR)	Passes Test
pH 1% in Water	3.5 – 4.1
Solubility 0.1M in H ₂ 0	Clear and Colorless
Total Aerobic Microbial Count	≤ 100 CFU/g
Total Yeast and Mold	≤ 100 CFU/g
Water (by Karl Fischer)	5.0 - 8.9%



AN	IALYSIS	SPECIFICATIONS
ace Elements	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)	\leq 5.0 ppm \leq 5.0 ppm \leq 3.0 ppm \leq 5.0 ppm

F.W.: 195.25 g/mol

CAS #: 1266615-59-1

Molecular Formula:

 $C_6H_{13}NO_4S\cdot H_2O$

www.biospectra.us

Tra

Quality Assurance / Regulatory Support / Quality Control

BI©SPECTRA Key Compliance Attributes of BioSpectra Grades	Bio Excipient Grade ICH-Q7 Compliant Manufactured
Suitable for Research and Diagnostic	✓
Each Batch 100% Analyzed	✓
Management of Change	✓
Validated Analytical Methods	✓
Trace Metals Analyzed	✓
Stability Testing Program	✓
BioSpectra Supply Chain Audit Trail	✓
Product Origin Statement	✓
Customer Quality Audits	✓
Validated Manufacturing Process	✓
US Manufactured at BioSpectra	✓
Customized Additional Specifications	✓
Multi-Compendial Testing	✓
Low Bioburden Low Endotoxin (LBLE)	✓
Suitable for use as Excipient	✓
Microbial / Endotoxin Tested	✓
Manufactured in FDA Registered Facility	✓
Custom Regulatory Packet	×
Accelerated Stability Video Conference access to BioSpectra Sites	· · · · · · · · · · · · · · · · · · ·
Complete access to Product Traceability	•
Access to Supply Chain Information	✓
ICH-Q7 Qualified Utilities	✓
ICH-Q7 Compliant Manufactured	✓



General Product Description:

- The manufacturing of Bio Excipient Grade MES, Hydrate MESH-3250 is performed at BioSpectra's Bangor, PA facility.
- MES is a White Crystalline product.
- Molecular Formula: C₆H₁₃NO₄S·H₂O
- Molecular Weight: 195.25 g/mol.
- CAS Number: 1266615-59-1.
- There are no known major food allergens (as defined by FDA and WHO) in the manufacture of this product.
- BioSpectra certifies that all MES, Hydrate MESH-3250 manufactured at BioSpectra and its raw materials are completely synthetic and are not derived from or come in contact with animal parts, products, and/or byproducts.
- Synonyms: 2-(N-Morpholino)ethanesulfonic acid, 4-Morpholineethanesulfonic acid monohydrate.

GMP Compliance:

Bio Excipient Grade MES, Hydrate MESH-3250 is suitable for use as an excipient. It is manufactured in accordance with the ICH-Q7 Good Manufacturing Practice Guide. This grade of MES, Hydrate is not suitable to be used as an Active Pharmaceutical Ingredient, Drug Product or Household Item.

Retest Date:

The recommended retest period for MES, Hydrate is two years from the date of manufacture.

Storage and Shipping Conditions:

Ship and Store in ambient temperature.

Package Sizes:

10kg, 25kg and 50kg pails.



www.biospectra.us