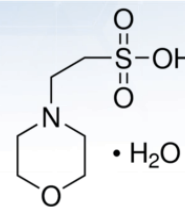


MES, Monohydrate

TECHNICAL PRODUCT SHEET

INTENDED FOR USE IN DIAGNOSTIC AND LABORATORY APPLICATIONS

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 MES Monohydrate to be used as a "Good's" buffer.



CAS #: 145224-94-8

Molecular Formula:

$C_6H_{13}NO_4S \cdot H_2O$

Solubility in Water (g/L): 310

F.W.: 213.25 g/mol

pH @ 20°C: 2.5 - 4.5

Useful pH: 5.5 - 6.7

pKa @ 20°C: 6.1

BIO ULTRA GRADE / Product Code: MESM-5220 | Previously: ME5220

$C_6H_{13}NO_4S \cdot H_2O$ · F.W. 213.25 g/mol. · CAS# 145224-94-8

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

ANALYSIS		SPECIFICATIONS
Absorbance (1M)	260 nm	0.20 a.u. max.
	280 nm	0.20 a.u. max.
Appearance and Color		White / Crystals
Assay		99.0% min.
Identification (IR)		Passes Test
pH (0.5M)		2.5 - 4.5
pH (5% Soln.)		3.0 - 3.5
Residue on Ignition		0.05% max.
Solubility (5% Soln.)		Passes Test

General Product Description:

- MES Monohydrate is a White Crystalline product.
- Molecular Formula: $C_6H_{13}NO_4S \cdot H_2O$
- Molecular Weight: 213.25 g/mol.
- CAS Number: 145224-94-8.
- Synonyms: 2-(N-Morpholino)ethanesulfonic acid, 4-Morpholineethanesulfonic acid monohydrate.



Intended Use Statement:

Material represented by this grade is suitable to be used only as the following: Quality System Manufactured Process Chemical for use in further manufacturing or as a reagent for laboratory and research. The material represented by this grade is not suitable to be used as an Excipient, Active Pharmaceutical Ingredient, Drug, Drug Product or household item.

Expiration/Retest Date:

BioSpectra does not assign expiration or retest dates for Bio Ultra Grade materials.

Storage and Shipping Conditions:

Ship and Store in ambient temperature.

Package Sizes:

10kg, 25kg and 50kg pails.

