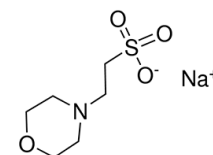


## MES, Sodium Salt, Ultra Low Water <5 %

**INTENDED FOR USE IN COMMERCIAL MANUFACTURING, DIAGNOSTIC AND LABORATORY APPLICATIONS**

MES Sodium salt is a zwitterionic salt of the Good's buffer MES. MES Sodium Salt is easily dissolved in water, contains a mid-range  $pK_a$  and a useful pH of 5.5-6.5. It is chemically stable with minimal absorption in both UV and visible spectral range. It is only one of three Good's buffers that can be used for equations using metal ions because it forms weak bonds with Ca, Mg, Mn and has negligible binding with Cu(II). It is suitable for use in electrophoresis, tissue culture media and other molecular biology applications.



**CAS #:** 71119-23-8

**Molecular Formula:**

$C_6H_{12}NO_4S \cdot Na$

**Solubility in Water (g/L):** 590

**F.W.:** 217.22 g/mol

**pH @ 20°C:** 8.5 - 10.4

**Useful pH:** 5.5 - 6.5

**$pK_a$  @ 20°C:** 6.1

**BIO ULTRA GRADE | Product Code: MESN-5222 | Previously: MN5222**

$C_6H_{12}NO_4S \cdot Na$  · F.W. 217.22 g/mol · CAS# 71119-23-8

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

ANALYSIS	SPECIFICATIONS
Appearance and Color	White Crystalline powder
Assay (dried basis)	99.0 – 101.5%
Color (1M, alkaline)	Colorless
Identification (IR)	Conforms to Reference
pH (1.0% Soln)	8.9 – 10.1
PVS Content	≤ 1 ppm
Solubility (5% Soln)	Passes Test
Water (Karl Fischer)	≤ 5%

### Key Compliance Attributes of Bio Ultra Grade

Suitable for Research and Diagnostic Application
C of A Available for Each Lot
BioSpectra Supply Chain Audit Trail
Product Origin Statement
Customer Quality Audits
Customized Additional Specifications
Enzyme Tested

### General Product Description:

- MES Sodium Salt is a White Crystalline product.
- Molecular Formula:  $C_6H_{12}NO_4S \cdot Na$
- Molecular Weight: 217.22 g/mol.
- CAS Number: 71119-23-8.
- Synonyms: 2-(N-morpholino)ethanesulfonic acid sodium salt.

### Compliance:

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 chemical for commercial manufacturing, diagnostic and laboratory 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.

### Retest Date:

Two years from date of manufacture, testing and packaging

### Storage and Shipping Conditions:

Ship and Store in ambient temperature.

### Package Sizes:

10kg, 25kg and 50kg pails.