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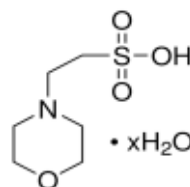
Outside USA: [eurtechserv@sial.com](mailto:eurtechserv@sial.com)

## Product Specification

Product Name:  
MES hydrate - ≥99.5% (titration), pH 2.5-4.0 (0.5 M in H<sub>2</sub>O), BioXtra

Product Number: **M5287**  
CAS Number: 1266615-59-1

Formula: C<sub>6</sub>H<sub>13</sub>NO<sub>4</sub>S · xH<sub>2</sub>O  
Formula Weight: 195.24 g/mol



TEST	Specification
Appearance (Color)	White
Appearance (Form)	Crystalline Powder
Water (by Karl Fischer)	≤ 9 %
Purity (Titr. by NaOH)	≥ 99.5 %
Anhydrous	
Solubility (Color)	Colorless
Solubility (Turbidity)	Clear
0.5 M in H <sub>2</sub> O	
Residue on ignition (Ash)	≤ 0.05 %
900 deg C	
Insoluble Matter	Pass
Passes filter test	
Chloride (Cl)	Pass
< or = 0.005%	
Aluminum (AL)	≤ 0.0005 %
Bismuth ( Bi)	≤ 0.0005 %
Lead (Pb)	≤ 0.0005 %
Barium	≤ 0.0005 %
Cadmium (Cd)	≤ 0.0005 %
Cobalt ( Co)	≤ 0.0005 %
Strontium (Sr)	≤ 0.0005 %
Copper (Cu)	≤ 0.0005 %
Zinc (Zn)	≤ 0.0005 %
Iron (Fe)	≤ 0.0005 %

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at [Sigma-Aldrich.com](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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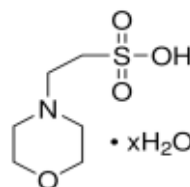
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TEST	Specification
Lithium	≤ 0.0005 %
Molybdenum (Mo)	≤ 0.0005 %
Nickel	≤ 0.0005 %
Chromium (Cr)	≤ 0.0005 %
Manganese (Mn)	≤ 0.0005 %
Calcium (Ca)	≤ 0.002 %
Magnesium (Mg)	≤ 0.0005 %
Potassium (K)	≤ 0.005 %
A260 UV Absorption 0.5 M in H <sub>2</sub> O	≤ 0.025
A280 UV Absorption 0.5 M in H <sub>2</sub> O	≤ 0.020
pH 0.5 M in H <sub>2</sub> O	2.5 - 4.0
Recommended Retest Period 5 years	-----
Sodium (Na)	≤ 0.005 %
Arsenic (As) < or = 0.0001%	Pass

Specification: PRD.6.ZQ5.10000006324

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