



## CERTIFICATE OF ANALYSIS

Product Name: MES, Anhydrous  
2-(4-morpholino)ethane Sulfonic Acid  
Catalog Number: M009  
Molecular Formula:  $C_6H_{13}NO_4S$  Lot Number: 12142002  
Formula Weight: 195.23 CAS Number: 4432-31-9

<u>Test</u>	<u>Specifications</u>	<u>Results</u>
Appearance	White Crystalline Powder	PASS
Purity	$\geq 99.0\%$	100.6 %
pKa (20°C)	6.05 to 6.25	6.15
pH (1% solution)	2.5 to 4.0	3.7
Loss on Drying	$\leq 3.0\%$	0.26
Heavy Metals (as Pb)	$\leq 15$ ppm	< 15
Solubility (10% solution in H <sub>2</sub> O)	clear, colorless and complete	PASS
Absorbance, 290 nm (20%,H <sub>2</sub> O) (w,w)	$\leq 0.05$	0.005

### Additional Information

Store at 15 - 30°C

Recommended Retest: Sept 30, 2017

**This product meets or exceeds the quality standards established by Caisson Laboratories, Inc.**

*This product is intended for Laboratory Use Only*

Becky Kowallis 12/5/2014  
Quality Control