

CERTIFICATE OF ANALYSIS

Product Description MES, MONOHYDRATE
2-(N-MORPHOLINO)ETHANESULFONIC ACID
Product Number M825
Lot Number HMX0825098
Storage Temperature Room Temperature
Molecular Weight 213.3 g/mol
Formula C₆H₁₃NO₄S•H₂O
CAS Number 145224-94-8

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 100 mg/mL	Passes
pH	Under Development	3.7
Physical Appearance: Color* Texture	PM-1 to PM-4 Fine to Crystalline Powder that may have larger clumps	PM-1 White Crystalline Powder
Solution Appearance: Clarity Color	Clear Colorless	Clear Colorless
Average Time to Dissolve (For Information Only)	Within 5 min	Passes
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity	Minimum 98.0%	99.60%

* Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color Preview™).

Biological Testing:

Test Concentration: 1.0 g/L

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
This product is commonly used as a buffering agent. It is tested with two or more plant cell lines to ensure there are no phytotoxic impurities that would inhibit growth or produce morphological aberrations to the plants.	Perilla Fantasy	Passes
	Xanthi Tobacco Callus	Passes

The material described in this certificate is synthetic. No animal- or plant-derived components were used in the manufacture of this product.

PhytoTech Labs Inc. provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTech Labs Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.

Date of Release: 06-February-2023

Recommended Shelf Life Date: February 2031



David Hart
Technical Director

PhytoTech Labs Inc.
14610 W 106TH St. Lenexa, KS 66215
Phone: 1-888-749-8682 or 1-913-341-5343
Fax: 1-888-449-8682 or 1-913-341-5442
Phytotechlab.com