

CERTIFICATE OF ANALYSIS

Product Description MES, MONOHYDRATE
2-(N-MORPHOLINO)ETHANESULFONIC ACID
Product Number M825
Lot Number 15B0825087
Storage Temperature Room Temperature
Molecular Weight 213.3
Formula C₆H₁₃NO₄S•H₂O
CAS Number 145224-94-8

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 100 mg/mL	Passes
pH	Under Development	3.3
Physical Appearance Color* Texture	PM-1 to PM-4 Fine to Crystalline Powder that may have larger clumps	PM-1 Off-White Crystalline Powder
Solution Appearance Clarity Color	Clear Colorless	Clear Colorless
Average Time to Dissolve	Within 5 min	Passes
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity	Minimum 98.0%	100%
Loss on Drying	For Information Only	8.7%

* 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.	African violet	Passes
	Perilla	Passes

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

PhytoTechnology Laboratories® provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTechnology Laboratories® 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.

Recommended Shelf Life Date: February 2023



Gary Seckinger, Ph.D.



PhytoTechnology
Laboratories®
Dedicated to Growth

PhytoTechnology Laboratories®

Mailing Address: P.O. Box 12205, Shawnee Mission, KS 66282-2205
Phone: 1-888-749-8682 (1-913-341-5343 *Outside the USA & Canada*)
Fax: 1-888-449-8682 (1-913-341-5442 *Outside the USA & Canada*)
Visit our Web Site at <http://www.phytotechlab.com>



Created on 19 Feb 2015 GS
Revised on 19 Mar 15 PN