

Certificate of Analysis

1 Reagent Lane Fair Lawn, NJ 07410 201.796.7100 tel 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	J18886	Quality Test / Release Date	08/26/2019
Lot Number	196035		
Description	MES MONOHYDRATE, ULTRAPURE		
Country of Origin	Taiwan	Suggested Retest Date	Aug/2024
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

N/A				
Result Name	Units	Specifications	Test Value	
APPEARANCE		REPORT	White/clear crystalline powder	
ABSORBANCE 1M SOL AT 250NM	NM	<= 0.1	<0.1	
ASSAY	%	>= 98.5	99.9	
IDENTIFICATION, I.R.	Matches Reference	= MATCHES REFERENCE	MATCHES REFERENCE	
SOLUBILITY, 100 MG/ML IN WATER	CLEAR_COLORLESS	= CLEAR AND COLORLESS	CLEAR AND COLORLESS	
LEAD (Pb)	ppm	<= 10	<1	
MOISTURE (KF)	%	<= 11	8.5	
PKA AT 20 DEGREES C	DEG C	Inclusive Between 6 - 6.3	6.07	
IRON (Fe)	ppm	<= 30	<1	

Derisa Bailey- Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn