

## Certificate of Analysis

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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	I77	Quality Test / Release Date	07/15/2021
Lot Number	213869		
Description	FERROUS AMMONIUM SULFATE, HEXAHYDRATE, CERTIFIED A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jul/2026
Chemical Origin	Inorganic Synthetic Non Animal		
BSE/TSE Comment	BSE/TSE free.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	PALE-GREEN MIXTURES OF CRYSTALS AND LARGE IRREGULAR PIECES
ASSAY	%	Inclusive Between 98.5 - 101.5	101.4
CALCIUM (Ca)	%	<= 0.005	<0.005
COPPER (Cu)	%	<= 0.003	<0.003
FERRIC IRON (FE+3)	%	<= 0.01	<0.01
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.01	<0.01
MAGNESIUM (Mg)	%	<= 0.002	<0.002
MANGANESE (Mn)	%	<= 0.01	<0.01
PH 5% SOLUTION @ 25 DEG C		Inclusive Between 3.0 - 5.0	3.8
PHOSPHATE (PO4)	%	<= 0.003	<0.003
POTASSIUM (K)	%	<= 0.002	<0.002
SODIUM (Na)	%	<= 0.02	0.02
ZINC (Zn)	%	<= 0.003	<0.003



Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.  
 If there are any questions with this certificate, please call at (800) 227-6701.

\*Based on suggested storage condition.