

## Certificate of Analysis

1 Reagent Lane	
Fair Lawn, NJ 07410	ThermoFisher Scientific's Quality System has been found to conform to Quality Management System
201.796.7100 tel	
201.796.1329 fax	Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

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. ThermoFisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing.ThermoFisher does not maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	J22561	Quality Test / Release Date	10/16/2017
Lot Number	177505		
Description	TRICINE, ULTRAPURE		
Country of Origin	Taiwan	Suggested Retest Date	Oct/2022
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	White clear crystalline powder
ABSORBANCE 5% SOLN @ 250NM		<= 0.1	<0.1
ASSAY	%	>= 98.5	101.2
LOSS ON DRYING	%	<= 0.5	0.1
PKA AT 25 DEGREES C		Inclusive Between 8.00 - 8.30	8.19
IRON (Fe)	ppm	<= 30	<30
LEAD (Pb)	ppm	<= 10	<10
IDENTIFICATION, I.R.	Matches Reference	= MATCHES REFERENCE	MATCHES REFERENCE

Jerisa Bailing- Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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