

Certificate of Analysis

1 Reagent Lane	
Fair Lawn, NJ 07410	
201.796.7100 tel	Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
201.796.1329 fax	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	BP1160	Quality Test / Release Date	07/17/2020	
Lot Number	203835			
Description	N,N-DIMETHYLFORMAMIDE, SEQUA - SYNTHESIS GRADE			
Country of Origin	Saudi Arabia	Suggested Retest Date	Jul/2025	
Chemical Origin	Organic - synthetic			
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.			

N/A					
Result Name	Units	Specifications	Test Value		
APPEARANCE		REPORT	CLEAR,COLORLESS LIQUID		
AMINES	ppm	<= 5	<5		
ASSAY	%	>= 99.5	99.9		
BOILING POINT	DEGREES CELSIUS	Inclusive Between 152 - 154	153		
BOILING POINT (INITIAL)	DEGREES CELSIUS	Inclusive Between 152 - 154	152.9		
BOILING RANGE	DEGREES CELSIUS	<= 2.0	0.7		
BOILING RANGE (DRY POINT)	DEGREES CELSIUS	Inclusive Between 152 - 154	153.6		
COLOR	APHA	<= 15	<5		
DENSITY AT 25 DEGREES C	GM/ML	Inclusive Between 0.942 - 0.946	0.944		
EVAPORATION RESIDUE	%	<= 0.005	<0.0005		
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST		
OPTICAL ABSORBANCE	PASS/FAIL	= PASS TEST	PASS TEST		
TITRATABLE ACID	MEQ/G	<= 0.0005	0.0003		
TITRATABLE BASE	MEQ/G	<= 0.003	<0.0003		
WATER (H2O)	%	<= 0.03	0.03		

Julian Buston

Julian Burton - Quality Control Manager - Bridgewater

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.