

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 – 0120633

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	D133	Quality Test / Release Date	07/08/2024	
Lot Number	242520	Expiration Date	Dec/2025	
Description	N,N-DIMETHYLFORMAMIDE, GC HEADSPACE			
Country of Origin	United States			
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	
ASSAY BY GC	%	>= 99.9	99.98	
COLOR	АРНА	<= 15	<15	
GC-HS CLASS 1 SOLVENT	PARTS PER MILLION	<= 1.0	<1	
GC-HS CLASS 2 SOLVENT	PARTS PER MILLION	<= 10	<10	
GC-HS CLASS 3 SOLVENT	PARTS PER MILLION	<= 50	<50	
GC-HS SUITABILITY TEST (PASS/FAIL)	PASS/FAIL	= PASS TEST	PASS TEST	
IDENTIFICATION		= PASS TEST	PASS TEST	
OPTICAL ABS AT 275 NM	AU	<= 0.300	0.169	
OPTICAL ABS AT 300 NM	AU	<= 0.050	0.034	
OPTICAL ABS AT 350 NM	AU	<= 0.005	-0.001	
OPTICAL ABS AT 400 NM	AU	<= 0.005	-0.002	
RESIDUE	PARTS PER MILLION	<= 5	<5	
WATER (H2O)	%	<= 0.03	0.004	

Kulyan Vanuhur.

Kalyan Paruchuri - Quality Control Supervisor - Bridgewater