

**CERTIFICATE OF ANALYSIS**

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by INTERTEK SAI Global  
Certificate Number. QMS42099

Catalogue Number	21058
Lot Number	2224100
Description	Dimethylformamide
CAS Number	68-12-2
Quality Test/Release Date	17/May/2022
Expiry Phrase	Use within 5 years of opening
Country of Origin	Saudi Arabia
Declaration of Origin	Synthetic
BSE/TSE	Not directly derived from or manufactured with any animal byproducts in any way (Including but not limited to fermentation or nutrient broth, catalysts, enzymes).

Result Name	Units	Specifications	Test Value
Acidity/alkalinity (meq/g)	meq/g	<= 0.0005	0.00004
Assay (GC)	%	>= 99.5	100
Calcium (Ca)	ppm	<= 1	<0.2
Chemical form		Mobile liquid	Mobile liquid
Colour	APHA	<= 10	<5
Copper (Cu)	ppm	<= 0.5	<0.02
Iron (Fe)	ppm	<= 0.1	<0.02
Lead (Pb)	ppm	<= 0.5	<0.005
Magnesium (Mg)	ppm	<= 0.5	<0.02
Potassium (K)	ppm	<= 0.5	<0.02
Residue after evaporation (ppm)	ppm	<= 20	None Detected
Sodium (Na)	ppm	<= 2	<0.2
Total phosphorus (P)	ppm	<= 0.5	<0.05
Total silicon (Si)	ppm	<= 0.05	<0.02
Total sulfur (S)	ppm	<= 1	<0.05
Visual colour		Clear colourless	Clear colourless
Water	%	<= 0.05	0.02
Zinc (Zn)	ppm	<= 0.5	<0.05

*A. Ganatra*

Ashok Ganatra  
Supervisor, QC

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research use or further manufacturing. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.