

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	BP2818
Lot Number	2223996
Description	Ethanol, Absolute, (200 proof) for Molecular Biology Fisher Bioreagent
CAS Number	64-17-5
Quality Test/Release Date	17/May/2022
Expiry Phrase	5 years of opening.
Country of Origin	United Kingdom
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
Acetone and Isopropyl Alcohol		Must be 'Pass'	Pass
Assay (v/v %)	% v/v	>= 99.5	100
Benzene (ppm)	ppm	<= 2	0.5
Chemical form		Mobile liquid	Mobile liquid
Colour	APHA	<= 10	<5
DNase		Must be 'Not detected'	Not detected
IR		Must be 'Pass'	Pass
Identification		Must be 'Pass'	Pass
Methanol	%	<= 0.10	0.0003
Protease		Must be 'Not detected'	Not detected
RNAse		Must be 'Not detected'	Not detected
Residue after evaporation (%)	%	<= 0.001	0.0002
Solubility in water		Must be 'Pass'	Pass
Substances darkened by H2SO4 (Pass/Fail)		Must be 'Pass'	Pass
Substances reducing KMnO4 (Pass/Fail)		Must be 'Pass'	Pass
Titrateable Acid	mEq/g	<= 0.0005	0.000017
Titrateable Base	mEq/g	<= 0.0002	None Detected
Visual colour		Clear colourless	Clear colourless
Water	%	<= 0.20	0.015

Additional Information Meets ACS Specification, Does not Contain any GMO material. Residual solvent, Contains <0.1% of the class 3 solvent methanol and <50ppm of class 3 solvent Propanol. Ethyl alcohol itself is a class 3 solvent



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.