

## CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek Global Certificate Number. CERT-0120633

Catalogue Number	BP152
Lot Number	260238
Description	TRIS (HYDROXYMETHYL) AMINOMETHANE
CAS Number	77-86-1
Quality Test/Release Date	20/May/2026
Suggested retest date	31/Jan/2029
Country of Origin	China
Declaration of Origin	Organic - non animal
BSE/TSE	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.

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	White Crystals
ABSORBANCE AT 280NM	ABSORBANCE UNITS	<= 0.05	0.012
ARSENIC (As)	ppm	<= 5	<5.0
ASSAY	%	>= 99.8	99.9
COPPER (Cu)	ppm	<= 1	<1
DNASE	detected-n/detected	= NOT DETECTED	NOT DETECTED
ELECTROPHORESIS IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	ppm	<= 2	<2
LEAD (Pb)	ppm	<= 1	<1
MAGNESIUM	ppm	<= 10	<10
PH OF 0.05M SOLUTION		Inclusive Between 10.3 - 10.5	10.4
PROTEASE	detected-n/detected	= NOT DETECTED	NOT DETECTED
RNASE	detected-n/detected	= NOT DETECTED	NOT DETECTED
WATER (H2O)	%	<= 2	<2

**Additional Information** This product has been evaluated for the source of raw materials and origin of those materials. It is produced from synthetic organic chemicals and water in a closed process where no additives or process aids are involved. There is no reason to believe that GMO genetically modified materials are present in this product.



Harout Sahagian  
QC Manager

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.

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