

## 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	W6
Lot Number	F25P5F101
Description	WATER, OPTIMA-LCMS GRADE
CAS Number	7732-18-5
Quality Test/Release Date	17/Jun/2025
Suggested retest date	26/May/2030
Country of Origin	South Korea
Declaration of Origin	Inorganic-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	CLEAR, COLORLESS LIQUID
EVAPORATION RESIDUE	ppm	<= 1	<1
IONIC IMPURITY - ALUMINUM (Al)	ppb	<= 10	<1
IONIC IMPURITY - BARIUM (Ba)	ppb	<= 10	<1
IONIC IMPURITY - CADMIUM (Cd)	ppb	<= 10	<1
IONIC IMPURITY - CALCIUM (Ca)	ppb	<= 20	<4
IONIC IMPURITY - CHROMIUM (Cr)	ppb	<= 10	<1
IONIC IMPURITY - COBALT (Co)	ppb	<= 10	<1
IONIC IMPURITY - COPPER (Cu)	ppb	<= 10	<1
IONIC IMPURITY - IRON (Fe)	ppb	<= 10	<1
IONIC IMPURITY - LEAD (Pb)	ppb	<= 10	<1
IONIC IMPURITY - MAGNESIUM (Mg)	ppb	<= 10	<1
IONIC IMPURITY - MANGANESE (Mn)	ppb	<= 10	<1
IONIC IMPURITY - NICKEL (Ni)	ppb	<= 10	<1
IONIC IMPURITY - POTASSIUM (K)	ppb	<= 10	<1
IONIC IMPURITY - SILVER (Ag)	ppb	<= 10	<1
IONIC IMPURITY - SODIUM (Na)	ppb	<= 20	<2
IONIC IMPURITY - TIN (Sn)	ppb	<= 10	<1
IONIC IMPURITY - ZINC (Zn)	ppb	<= 10	<1
LC GRADIENT TEST WITH PDA (200-400 NM)	mAU	<= 2	<2
LCMS SUITABILITY - POS. MODE (AS PROPAZINE)	ppb	<= 50	<50
LCMS SUITABILITY-NEG.MODE (AS CHLORAMPHENICOL)	ppb	<= 50	<50
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.01	<0.01
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.01	<0.01
OPTICAL ABS AT 230 NM	ABS. UNITS	<= 0.01	<0.01
OPTICAL ABS AT 240 NM	ABS. UNITS	<= 0.01	<0.01
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.005	<0.005
OPTICAL ABS AT 260 NM	ABS. UNITS	<= 0.005	<0.005
OPTICAL ABS AT 280 NM	ABS. UNITS	<= 0.005	<0.005
PROTEASE	DETECTED/NOT DETECT.	IN NOT DETECTED	NOT DETECTED
TOTAL HALOGEN	DETECTED/NOT DETECT.	IN NOT DETECTED	NOT DETECTED

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.

**Additional Information** HPLC/UHPLC-UV Gradient Suitability: Peak Height with PDA (200-400 nm)  $\leq$  2 mAU



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.

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