

## CERTIFICATE OF ANALYSIS

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

Catalogue Number	A456
Lot Number	2525611
Description	Methanol LC-MS For LC-MC analysis
CAS Number	67-56-1
Quality Test/Release Date	05/Feb/2025
Expiry Phrase	Expires:5 years from analysis date
Country of Origin	Trinidad and Tobago

Result Name	Units	Specifications	Test Value
APPEARANCE		Must be 'CLEAR, COLORLESS LIQUID'	CLEAR, COLORLESS LIQUID
ASSAY	%	>= 99.9	100.00
COLOR	APHA	<= 10	<5
EVAPORATION RESIDUE	ppm	<= 1	None Detected
IDENTIFICATION		Must be 'PASS'	PASS
IONIC IMPURITY - ALUMINUM (Al)	ppb	<= 10	<5
IONIC IMPURITY - BARIUM (Ba)	ppb	<= 10	<2
IONIC IMPURITY - CADMIUM (Cd)	ppb	<= 10	<2
IONIC IMPURITY - CALCIUM (Ca)	ppb	<= 20	<10
IONIC IMPURITY - CHROMIUM (Cr)	ppb	<= 10	<2
IONIC IMPURITY - COBALT (Co)	ppb	<= 10	<2
IONIC IMPURITY - COPPER (Cu)	ppb	<= 10	<5
IONIC IMPURITY - IRON (Fe)	ppb	<= 10	<5
IONIC IMPURITY - LEAD (Pb)	ppb	<= 10	<5
IONIC IMPURITY - MAGNESIUM (Mg)	ppb	<= 10	<5
IONIC IMPURITY - MANGANESE (Mn)	ppb	<= 10	<2
IONIC IMPURITY - NICKEL (Ni)	ppb	<= 10	<2
IONIC IMPURITY - POTASSIUM (K)	ppb	<= 10	<10
IONIC IMPURITY - SILVER (Ag)	ppb	<= 10	<2
IONIC IMPURITY - SODIUM (Na)	ppb	<= 50	<50
IONIC IMPURITY - TIN (Sn)	ppb	<= 10	<5
IONIC IMPURITY - ZINC (Zn)	ppb	<= 10	<5
LC GRADIENT TEST WITH PDA (200-400 NM)	mAU	<= 2	None Detected
LCMS SUITABILITY - NEG. MODE (AS CHLORAMPHENICOL)	ppb	<= 50	<50
LCMS SUITABILITY - POS. MODE (AS PROPAZINE)	ppb	<= 100	<100
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.5	0.078
OPTICAL ABS AT 214 NM	ABS. UNITS	<= 0.4	0.024
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.2	0.006
OPTICAL ABS AT 230 NM	ABS. UNITS	<= 0.1	0.001
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.01	0.002
OPTICAL ABS AT 260 NM	ABS. UNITS	<= 0.005	0.003
OPTICAL ABS AT 280 NM	ABS. UNITS	<= 0.005	0.004
TITRATABLE ACID	mEq/g	<= 0.0003	0.0002
TITRATABLE BASE	mEq/g	<= 0.0002	0.00002
WATER (H2O)	%	<= 0.02	0.01

**Additional Information** Filtered to 0.1 micron

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.

*A. Ganatra*

Ashok Ganatra  
Supervisor, QC

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