

Certificate of Analysis

Product: Methanol
Grade: HPLC
Part No: 1915-5

Lot:	M7F201
Mfg. Date:	2022-07-15
Exp. Date:	3 years after Mfg. Date

Manufactured by Duksan Pure Chemicals

Maximum UV Absorbance:

Wavelength	Unit	Specification (Max)	Results
220	nm	0.25	0.16
230	nm	0.15	0.07
254	nm	0.02	0.01
280	nm	0.01	0.001
UV Cutoff	nm	205	<205

LC Gradient Suitability:

Gradient Elution Test	Unit	Specification (Max)	Results
Largest Eluted Peak (254nm)	mAU	2	<2

Fluorescence Trace Impurities	Unit	Specification (Max)	Results
At 450nm Emission	ppb	0.3	<0.3
At Emission Maximum for Impurities	ppb	0.5	<0.5

Test	Unit	Specification	Results
Assay (by GC)	%	Min. 99.9	99.9
Color (APHA)		Max. 10	1
Water	%	Max. 0.05	0.007
Residue After Evaporation	ppm	Max. 1	<1
Titration Acid	mEq/g	Max. 0.0003	0.0001
Titration Base	mEq/g	Max. 0.0002	0.00003
Carbonyl Compounds (each of Acetone, Formaldehyde and Acetaldehyde)	%	0.001%	<0.001
Substances Darkened by Sulfuric Acid		To Pass Test	Pass
Substances Reducing Permanganate		To Pass Test	Pass
Solubility in Water		To Pass Test	Pass

Created By:
 James Osborn
 Quality Associate