

## Certificate of Analysis

<b>Product</b>	Methanol	<b>Batch No.</b>	: 21 06 0349
<b>Grade</b>	LC-MS	<b>Manufacturing date</b>	: 30/06/2021
<b>Code No.</b>	LM1115	<b>Best before</b>	: 06/2025

Items	Descriptions	Specifications	Test Results
1	Assay (by GC.)	99.9% min.	99.9%
2	Identity (IR)	Passes test	Passes test
3	Color (APHA)	10 max.	< 10
4	Water (by Coulometry)	0.02% max.	0.012%
5	Acidity (mEq./g.)	0.0003 max.	< 0.0003
6	Alkalinity (mEq./g.)	0.0002 max.	< 0.0002
7	Residue on Evaporation	0.0001% max.	< 0.0001%
8	UV Transmission Levels (%T)		
	250 nm	99% min.	99.9%
	240 nm	98% min.	99.4%
	230 nm	90% min.	97.6%
	220 nm	75% min.	93.8%
	210 nm	65% min.	77.0%
9	Gradient Specification		
	at 230 nm	2.0 mAU max.	< 2.0 mAU
	at 254 nm	1.0 mAU max.	< 1.0 mAU
10	Fluorescence (as quinine)		
	at 254 nm	1 ppb max.	< 1 ppb
	at 365 nm	1 ppb max.	< 1 ppb
11	Aluminium (Al)	5 ppb max.	< 5 ppb
12	Barium (Ba)	5 ppb max.	< 5 ppb
13	Cadmium (Cd)	5 ppb max.	< 5 ppb
14	Calcium (Ca)	20 ppb max.	< 20 ppb
15	Chromium (Cr)	5 ppb max.	< 5 ppb
16	Cobalt (Co)	5 ppb max.	< 5 ppb
17	Copper (Cu)	5 ppb max.	< 5 ppb
18	Iron (Fe)	10 ppb max.	< 10 ppb
19	Lead (Pb)	5 ppb max.	< 5 ppb
20	Magnesium (Mg)	5 ppb max.	< 5 ppb
21	Manganese (Mn)	5 ppb max.	< 5 ppb
22	Nickel (Ni)	5 ppb max.	< 5 ppb
23	Potassium (K)	5 ppb max.	< 5 ppb
24	Sodium (Na)	20 ppb max.	< 20 ppb
25	Tin (Sn)	5 ppb max.	< 5 ppb
26	Zinc (Zn)	5 ppb max.	< 5 ppb

Product passed through 0.1 micron final filter and bottled under inert gas.

This is to certify the above batch has been tested and complies with this specification.

Ladaphan

Chemist

Achim

Technical Manager