

Certificate of Analysis

Methanol Lot # P20241118007

<u>Component</u>	<u>Unit</u>	<u>Method</u>	<u>Min</u>	<u>Max</u>	<u>Result</u>
IBP @ 760 mmHg	°C	D1078	-	64.7	64.4
FBP @ 760 mmHg	°C	D1078	64.5	-	64.7
Boiling Range	°C	D1078	-	1.0	0.3
Color	Pt-Co Unit	D1209	-	10.0	< 5
Odor		D1296	-	-	Characteristic
Non-Volatile Matter	mg/1000mL	D1353	1.0	5.0	1
Potassium Permanganate Time @ 15°C	Minutes	D1363	50.0	-	> 60
Acidity, as Acetic Acid	Wt. %	D1613	-	0.003	0.0008
Alkalinity	Wt. %	D1614	-	-	< 0.0001
Hydrocarbons	-	D1722	-	-	Pass
Specific Gravity @ 25°/25°C	-	D4052	0.7883	0.7893	0.7889
Specific Gravity @ 20°/20°C	-	D4052	0.792	0.793	0.7925
Water Content	Wt. %	E1064	-	0.1	0.016
Carbonizable	Pt-Co Unit	E346	-	-	< 5
Iron Content	ppm	E394	-	0.1	< 0.01
Other Alcohols	Wt. %	GC	-	-	< 0.0005
Other Impurities	Wt. %	GC	-	-	< 0.0005
Purity	Wt. %	IMPCA 001	99.85	-	99.99
Ethanol	ppm	IMPCA 001	-	50.0	5
Acetone	Wt. %	IMPCA 001	-	0.003	< 0.0005
Chlorides	mg/kg	IMPCA 002	-	0.5	< 0.25
Appearance	-	IMPCA 003	-	-	CFSM
Total Sulfur	ppm	D5453	-	-	< 0.5
Acetone & Aldehydes	Wt. %	E346	-	0.003	< 0.003

Date: 11/2024

Supplier: CellMark

Shelf-Life Statement:

The shelf life is dependent on many variables, including container type, storage temperature, atmospheric breathing etc. Because of the effect of these variables, it is difficult to make a firm prediction of shelf life. However, based on our observations over many years, A.G. Layne certifies the shelf life for **1 year** from the time of delivery to the customer, if stored inside, in a cool dry climate-controlled storage facility maintained between 40°F and 85°F. Product must be stored on pallets or off the ground. ANY WARRANTY RELATED TO THIS MATERIAL IS STRICTLY LIMITED TO THE REPLACEMENT VALUE OF THE SOLVENT ONLY.