

## CERTIFICATE OF ANALYSIS

### ME0503\_26178910/1

Product 1-Methyl-2-pyrrolidone, GC head space grade	Batch 26178910
<b>ME0503</b>	Quality release date 13/10/2025
	Expiry date 10/2028

Analysis	Batch value	Specifications
Assay (G.C.)	99,89 %	≥ 99,8
Refractive index n <sub>20</sub> /D	1,4708	1,468 - 1,471
Water (K.F.)	0,0293 %	≤ 0,05
Class 1 according to ICH less than 0,5 ppm.		
Benzene	absence of peak	absence of peak
Class 2 and class 3 solvents:		
Dichloromethane	≤ 0,6 mg/L	≤ 0,6
tert-Butyl methyl ether	≤ 1 mg/L	≤ 1
Acetone	≤ 1 mg/L	≤ 1
Methanol	≤ 1 mg/L	≤ 1
Tetrahydrofuran	≤ 0,7 mg/L	≤ 0,7
n-Hexane	≤ 0,3 mg/L	≤ 0,3
Ethyl acetate	≤ 1 mg/L	≤ 1
Ethanol	≤ 1 mg/L	≤ 1
Cyclohexane	≤ 1 mg/L	≤ 1
Acetonitrile	≤ 0,4 mg/L	≤ 0,4
2-Propanol	≤ 1 mg/L	≤ 1
Isopropyl acetate	≤ 1 mg/L	≤ 1
n-Propanol	≤ 1 mg/L	≤ 1
n-Heptane	≤ 1 mg/L	≤ 1
Methylcyclohexane	≤ 1 mg/L	≤ 1
1,4-Dioxane	≤ 0,4 mg/L	≤ 0,4
Toluene	≤ 0,9 mg/L	≤ 0,9
Pyridine	≤ 1 mg/L	≤ 1
n-Butanol	≤ 1 mg/L	≤ 1
Butyl acetate	≤ 1 mg/L	≤ 1
Ethylbenzene	≤ 1 mg/L	≤ 1
p-Xylene	≤ 1 mg/L	≤ 1
m-Xylene	≤ 1 mg/L	≤ 1
o-Xylene	≤ 1 mg/L	≤ 1
Other class 2 solvents	≤ 10 mg/L	≤ 10
Other class 3 solvents	≤ 50 mg/L	≤ 50

Suitable for residual solvent analysis according to guideline CPMP/ICH/283/95, PhEur and USP.

For laboratory use only.