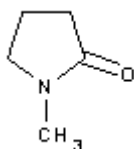


**PRODUCT CODE: 133080****1-Methyl-2-Pyrrolidone for analysis, ACS**

C₅H₉NOC₅H₉NO

M.= 99,13

CAS [872-50-4]

EINECS 212-828-1

TARIC 2933 79 00 90

SYNONYMS: N-Methylpyrrolidone, NMP

PHYSICAL DATA: liquid, Clear, Colourless, Miscible with water • Hygroscopic • D 20/4 1,033 • M.P.: -23 °C • B.P.: 202 °C • pH8,5 - 10,0 • n₂₀/D : 1,4684 • Flash P.:95 °C • Ign. T.:269 °C • Vap. press. (100 °C) 40 hPa • Viscosity 20 °C 1,67 mPa.s • D. M. 20 °C 4,1 Debye • Dielec. constant25 °C 33 • Expl. limit1,3 %(V)9,5 %(V) •

BIBLIOGRAPHY: Merck Index **13**, 6.140 Sax **MPB**750 • Safety **2**, **2433 A** • Kühn-Birett **M** 34 • Ullmann (**5.**)2 , 182 • Beilstein **21**, **237 II**, **213 III/IV**, **3145 V**, **321** • BRN 106420 • Fieser **1696** **2281** **9316** **11346** • ACS **XI** • BP.**2018** • Ph. Eur. **8.0** (2014) **9.0** (2017) •

HAZARDOUS: C.E: 606-021-00-7 • RTECS: UY 5790000 • LD50 oral rat 3.914 mg/kg • LC50 rat 5.1mg/l / 4h • LD50 skn rbt 8.000 mg/kg • LD50 ipr mus 3.050 mg/kg VLA-EC 75 ppm309 mg/m3 VLA-ED 25 ppm103 mg/m3



H: H360D • H319 • H335 • H315 •

P: P201 • P202 • P261 • P264 • P271 • P280 • P281 • P302+P352 • P304+P340 • P305+P351+P338 • P308+P313 • P312 • P321 • P332+P313 • P337+P313 • P362 • P403+P233 • P405 • P501 •

WEIGHT/VOLUME INFORMATION: 1l~1,033 kg 1kg~0,968 l**OBSERVATIONS:** Storage away from direct light. •

SPECIFICATIONS:

Minimum assay (G.C.)	99,5%
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Maximum limit of impurities

APHA colour	50
Chloride (Cl)	0,0001%
Free amines (as CH ₃ NH ₂)	0,01%
Water (H ₂ O)	0,05 %
Al	0,00001 %
Au	0,00001 %
Cr	0,00001 %
Cu	0,00001 %
Fe	0,00001 %
K	0,00001 %
Mg	0,00001 %
Mn	0,00001 %
Ni	0,00001 %
Pb	0,00001 %
Sb	0,000005 %
Sn	0,00001 %
Ti	0,00001 %
Zn	0,000005 %

Microfiltered product (0.2 µm) and bottled under nitrogen atmosphere.

Ed.: 3 . Vig.: 15.01.2011 .

Prod.: 133080