

Morpholine, 4-acetyl-

Other names:	4-acetylmorpholine N-1-Acetyl morpholine N-Acetylmorfolin N-Acetylmorpholine
Inchi:	InChI=1S/C6H11NO2/c1-6(8)7-2-4-9-5-3-7/h2-5H2,1H3
InchiKey:	KYWXRBNYOYGGPIZ-UHFFFAOYSA-N
Formula:	C6H11NO2
SMILES:	CC(=O)N1CCOCC1
Mol. weight [g/mol]:	129.16
CAS:	1696-20-4

Physical Properties

Property code	Value	Unit	Source
log10ws	0.34		Crippen Method
logp	-0.135		Crippen Method
mcvol	101.960	ml/mol	McGowan Method
rinpol	1133.00		NIST Webbook
rinpol	1133.00		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
dvisc	0.0038480	Paxs	323.15	Viscosities and Densities of Binary Mixtures of (N-Acetylmorpholine + Alkanols) from (293.15 to 323.15) K

dvisc	0.0071000	Paxs	303.15	Densities, Viscosities and Derived Functions of Binary Mixtures: (Triethylene Glycol Dimethyl Ether + Water) and (N-acetylmorpholine+ Water) from 298.15 to 343.15 K
dvisc	0.0051800	Paxs	313.15	Densities, Viscosities and Derived Functions of Binary Mixtures: (Triethylene Glycol Dimethyl Ether + Water) and (N-acetylmorpholine+ Water) from 298.15 to 343.15 K
dvisc	0.0039600	Paxs	323.15	Densities, Viscosities and Derived Functions of Binary Mixtures: (Triethylene Glycol Dimethyl Ether + Water) and (N-acetylmorpholine+ Water) from 298.15 to 343.15 K
dvisc	0.0031200	Paxs	333.15	Densities, Viscosities and Derived Functions of Binary Mixtures: (Triethylene Glycol Dimethyl Ether + Water) and (N-acetylmorpholine+ Water) from 298.15 to 343.15 K
dvisc	0.0025500	Paxs	343.15	Densities, Viscosities and Derived Functions of Binary Mixtures: (Triethylene Glycol Dimethyl Ether + Water) and (N-acetylmorpholine+ Water) from 298.15 to 343.15 K

dvisc	0.0085340	Paxs	293.15	Viscosities and Densities of Binary Mixtures of (N-Acetylmorpholine + Alkanols) from (293.15 to 323.15) K
dvisc	0.0070520	Paxs	303.15	Viscosities and Densities of Binary Mixtures of (N-Acetylmorpholine + Alkanols) from (293.15 to 323.15) K
dvisc	0.0051220	Paxs	313.15	Viscosities and Densities of Binary Mixtures of (N-Acetylmorpholine + Alkanols) from (293.15 to 323.15) K
dvisc	0.0084800	Paxs	298.15	Densities, Viscosities and Derived Functions of Binary Mixtures: (Triethylene Glycol Dimethyl Ether + Water) and (N-acetylmorpholine+ Water) from 298.15 to 343.15 K
rhoI	1113.80	kg/m3	293.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	1105.90	kg/m3	303.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K

rhoI	1097.30	kg/m ³	313.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	1088.70	kg/m ³	323.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	1080.10	kg/m ³	333.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	1071.50	kg/m ³	343.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	425.20	K	6.70	NIST Webbook
tbrp	391.20	K	1.60	NIST Webbook

Sources

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C1696204&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci990307I>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbons) mixtures at T = 293.15 K: <https://www.doi.org/10.1016/j.jct.2008.07.009>
 Densities, Viscosities and Derived Functions of Binary Mixtures: Cyclohexane or Decalin + Nitrobenzene or Toluene: <https://www.doi.org/10.1021/je050021e>
 Viscosities and Densities of Binary Mixtures of (N-Acetylmorpholine + Water) from 293.15 to 323.15 K: <https://www.doi.org/10.1021/je8003194>

Legend

dvisc:	Dynamic viscosity
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
rho:	Liquid Density
rinpol:	Non-polar retention indices
tbrp:	Boiling point at reduced pressure

Latest version available from:

<https://www.chemeo.com/cid/39-638-1/Morpholine-4-acetyl.pdf>

Generated by Cheméo on 2025-12-05 19:53:35.212451628 +0000 UTC m=+4712612.742492282.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.