2-Propanone, O-methyloxime

Other names:	Acetone, O-methyloxime
	acetone oxime O-methyl ether
	propan-2-one O-methyl oxime
Inchi:	InChI=1S/C4H9NO/c1-4(2)5-6-3/h1-3H3
InchiKey:	QMOLZSLXSAVSPU-UHFFFAOYSA-N
Formula:	C4H9NO
SMILES:	CON=C(C)C
Mol. weight [g/mol]:	87.12
CAS:	3376-35-0

Physical Properties

Property code	Value	Unit	Source
hf	-185.68	kJ/mol	Joback Method
hvap	30.30	kJ/mol	Joback Method
ie	9.16	eV	NIST Webbook
log10ws	-0.74		Crippen Method
logp	1.029		Crippen Method
mcvol	78.770	ml/mol	McGowan Method
pc	3384.14	kPa	Joback Method
tb	389.90	K	Joback Method
tc	583.98	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
pvap	96.30	kPa	344.10	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa

pvap	21.30	kPa	307.80	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	26.30	kPa	312.40	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	32.30	kPa	316.60	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	36.30	kPa	319.60	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	42.30	kPa	322.90	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	51.30	kPa	327.60	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	56.30	kPa	330.00	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa

pvap	61.30	kPa	332.20	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	66.30	kPa	334.20	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	71.30	kPa	336.10	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	76.30	kPa	337.70	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	81.30	kPa	339.60	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	86.30	kPa	341.00	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
pvap	91.30	kPa	342.60	Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa
rhol	830.00	kg/m3	293.15	Liquid Liquid Equilibrium for the Ternary System Acetone Oxime Methyl Ether Acetone Water

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Isobaric vapor-liquid equilibria of the binary system acetone + acetone oxime methyl ether at 101.3 kPa:	https://www.doi.org/10.1016/j.fluid.2012.12.028
Liquid-Liquid Equilibrium for the Ternary System Acetone Oxime Methyl Ether Acetone Water:	https://www.doi.org/10.1021/je301319g
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3376350&Units=SI

Legend

hf:	Enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rhol:	Liquid Density
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature