Ethanol, 2-methoxy-, acetate

Other names:	(Z)--Methoxyethyl acetate
	2-Methoxy-ethyl acetaat
	2-Methoxyaethylacetat
	2-Methoxyethanol acetate
	2-Methoxyethyl acetate
	2-Methoxyethyl ester of acetic acid
	2-Methoxyethyle, acetate de
	2-Methoxyethylester kyseliny octove
	2-Metossietilacetato
	Acetate de L'ether monomethylique de L'ethylene-glycol
	Acetate de methyle glycol
	Acetato di metil cellosolve
	Acetic acid 2-methoxyethyl ester
	Acetyl methyl cellosolve
	Aethylenglykolmethylaetheracetat
	CH3C(O)O(CH2)2OCH3
	Ethylene glycol acetate monomethyl ether
	Ethylene glycol methyl acetate
	Ethylene glycol methyl ether acetate
	Ethylene glycol monomethyl ether acetate
	Glycol ether em acetate
	Glycol monomethyl ether acetate
	MeCsAc
	Methyl cellosolve acetate
	Methyl cellosolye acetaat
	Methyl glycol acetate
	Methyl glycol monoacetate
	Methylcelosolvacetat
	Methylglykolacetat
	UN 1189
	«beta»-Methoxyethyl acetate
	Â«betaÂ»-Methoxyethyl acetate
Inchi:	InChI=1S/C5H10O3/c1-5(6)8-4-3-7-2/h3-4H2,1-2H3
InchiKey:	XLLIQLLCWZCATF-UHFFFAOYSA-N
Formula:	C5H10O3
SMILES:	COCCOC(C)=O
Mol. weight [g/mol]:	118.13
CAS:	110-49-6

Physical Properties

Property code	Value	Unit	Source
gf	-347.70	kJ/mol	Joback Method
hf	-572.60 ± 8.60	kJ/mol	NIST Webbook
hfl	-622.80 ± 8.60	kJ/mol	NIST Webbook
hfus	12.68	kJ/mol	Joback Method
hvap	50.27 ± 0.06	kJ/mol	NIST Webbook
hvap	50.30 ± 0.10	kJ/mol	NIST Webbook
hvap	50.20	kJ/mol	NIST Webbook
log10ws	0.13		Crippen Method
logp	0.196		Crippen Method
mcvol	94.620	ml/mol	McGowan Method
pc	3589.94	kPa	Joback Method
rinpol	757.00		NIST Webbook
rinpol	773.00		NIST Webbook
rinpol	756.00		NIST Webbook
rinpol	773.00		NIST Webbook
rinpol	756.00		NIST Webbook
tb	418.15	K	NIST Webbook
tb	416.40 ± 0.25	K	NIST Webbook
tb	417.70	K	NIST Webbook
tc	591.12	K	Joback Method
tf	208.05	K	NIST Webbook
vc	0.357	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	184.32	J/mol×K	412.51	Joback Method
cpg	231.33	J/mol×K	591.12	Joback Method
cpg	224.02	J/mol×K	561.35	Joback Method
cpg	216.48	J/mol×K	531.58	Joback Method
cpg	208.73	J/mol×K	501.81	Joback Method
cpg	200.78	J/mol×K	472.05	Joback Method
cpg	192.64	J/mol×K	442.28	Joback Method
cpl	310.00	J/mol×K	298.15	NIST Webbook
dvisc	0.0012761	Pa×s	269.17	Joback Method
dvisc	0.0002471	Pa×s	412.51	Joback Method

dvisc	0.0003111	Pa×s	383.84	Joback Method
dvisc	0.0004065	Pa×s	355.17	Joback Method
dvisc	0.0005566	Pa×s	326.50	Joback Method
dvisc	0.0008098	Pa×s	297.84	Joback Method
dvisc	0.0022410	Pa×s	240.50	Joback Method
hvapt	44.30	kJ/mol	380.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.59996e+01
Coeff. B	-4.29771e+03
Coeff. C	-3.85380e+01
Temperature range (K), min.	312.07
Temperature range (K), max.	440.64

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C110496&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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

Joback Method: https://en.wikipedia.org/wiki/Joback_method

Legend

cpg: Ideal gas heat capacity

cpl: Liquid phase heat capacity

dvisc: Dynamic viscosity

gf: Standard Gibbs free energy of formation

hf: Enthalpy of formation at standard conditions

hfl: Liquid phase enthalpy of formation at standard conditions

hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume