Ethene, (2-methoxyethoxy)-

Other names:	Ethane, 1-methoxy-2-(vinyloxy)-
	Vinyl 2-methoxyethyl ether
	1-Methoxy-2-(vinyloxy)ethane
	2-Methoxyethyl ethenyl ether
	2-Methoxyethyl vinyl ether
	CH3OCH2CH2OCH=CH2
	Ether, (2-methoxyethyl) vinyl-
	Ethylene glykol methyl vinyl ether
	Methylvinylether ethylenglykolu
	NSC 2143
	(2-Methoxyethoxy)ethene
Inchi:	InChI=1S/C5H10O2/c1-3-7-5-4-6-2/h3H,1,4-5H2,2H3
InchiKey:	GXZPMXGRNUXGHN-UHFFFAOYSA-N
Formula:	C5H10O2
SMILES:	C=COCCOC
Mol. weight [g/mol]:	102.13
CAS:	1663-35-0

Physical Properties

Property code	Value	Unit	Source
gf	-130.94	kJ/mol	Joback Method
hf	-285.54	kJ/mol	Joback Method
hfus	9.80	kJ/mol	Joback Method
hvap	30.87	kJ/mol	Joback Method
log10ws	-0.44		Crippen Method
logp	0.793		Crippen Method
mcvol	88.750	ml/mol	McGowan Method
pc	3501.28	kPa	Joback Method
rinpol	682.00		NIST Webbook
rinpol	684.00		NIST Webbook
rinpol	682.00		NIST Webbook
tb	381.00 ± 5.00	K	NIST Webbook
tc	524.21	K	Joback Method
tf	188.81	K	Joback Method
vc	0.333	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	156.30	J/mol×K	355.32	Joback Method
cpg	164.13	J/mol×K	383.47	Joback Method
cpg	171.80	J/mol×K	411.62	Joback Method
cpg	179.31	J/mol×K	439.76	Joback Method
cpg	186.65	J/mol×K	467.91	Joback Method
cpg	193.81	J/mol×K	496.06	Joback Method
cpg	200.79	J/mol×K	524.21	Joback Method
dvisc	0.0021125	Pa×s	188.81	Joback Method
dvisc	0.0011009	Pa×s	216.56	Joback Method
dvisc	0.0006653	Pa×s	244.31	Joback Method
dvisc	0.0004456	Pa×s	272.07	Joback Method
dvisc	0.0003214	Pa×s	299.82	Joback Method
dvisc	0.0002450	Pa×s	327.57	Joback Method
dvisc	0.0001949	Pa×s	355.32	Joback Method

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
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=C1663350&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hvap: Enthalpy of vaporization at standard conditions
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient

mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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