Ethanol, 2-(vinyloxy)-

Other names:	Ethylene glycol monovinyl ether
	Ethanol, 2-(ethenyloxy)-
	Ethylene glycol vinyl ether
	Ethyleneglycol monovinyl ester
	Vinyloxyethanol
	2-(Vinyloxy)ethanol
	2-Hydroxyethyl vinyl ether
	Ethylenglycol monovinyl ester
	Mveeg
Inchi:	InChI=1S/C4H8O2/c1-2-6-4-3-5/h2,5H,1,3-4H2
InchiKey:	VUIWJRYTWUGOOF-UHFFFAOYSA-N
Formula:	C4H8O2
SMILES:	C=COCCO
Mol. weight [g/mol]:	88.11
CAS:	764-48-7

Physical Properties

Property code	Value	Unit	Source
gf	-171.18	kJ/mol	Joback Method
hf	-284.91	kJ/mol	Joback Method
hfus	10.11	kJ/mol	Joback Method
hvap	42.92	kJ/mol	Joback Method
log10ws	-0.20		Crippen Method
logp	0.139		Crippen Method
mcvol	74.660	ml/mol	McGowan Method
pc	4534.68	kPa	Joback Method
tb	413.00 ± 3.00	K	NIST Webbook
tc	567.94	K	Joback Method
tf	216.13	K	Joback Method
vc	0.278	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	140.18	J/mol×K	402.20	Joback Method
cpg	146.43	J/mol×K	429.82	Joback Method
cpg	152.48	J/mol×K	457.45	Joback Method
cpg	158.34	J/mol×K	485.07	Joback Method
cpg	164.01	J/mol×K	512.70	Joback Method
cpg	169.50	J/mol×K	540.32	Joback Method
cpg	174.80	J/mol×K	567.94	Joback Method
dvisc	0.0525093	Pa×s	216.13	Joback Method
dvisc	0.0125619	Pa×s	247.14	Joback Method
dvisc	0.0041341	Pa×s	278.15	Joback Method
dvisc	0.0017004	Pa×s	309.17	Joback Method
dvisc	0.0008224	Pa×s	340.18	Joback Method
dvisc	0.0004490	Pa×s	371.19	Joback Method
dvisc	0.0002692	Pa×s	402.20	Joback Method

Sources

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=C764487&Units=SI

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

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

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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point

vc: Critical Volume