Vinyl ethyl carbitol

Other names: 2-[2-[2-(ethenyloxy)ethoxy]ethoxy]ethanol
Inchi: InChI=1S/C8H16O4/c1-2-10-5-6-12-8-7-11-4-3-9/h2,9H,1,3-8H2
InchiKey: XRBWKWGATZNBFW-UHFFFAOYSA-N
Formula: C8H16O4
SMILES: C=COCCOCCOCCO
Mol. weight [g/mol]: 176.21
CAS: 929-72-6

Physical Properties

Property code	Value	Unit	Source
gf	-347.50	kJ/mol	Joback Method
hf	-631.91	kJ/mol	Joback Method
hfus	22.85	kJ/mol	Joback Method
hvap	56.64	kJ/mol	Joback Method
log10ws	-0.05		Crippen Method
logp	0.172		Crippen Method
mcvol	142.760	ml/mol	McGowan Method
pc	2761.36	kPa	Joback Method
tb	538.56	K	Joback Method
tc	701.04	K	Joback Method
tf	305.67	K	Joback Method
vc	0.537	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	344.69	J/mol×K	538.56	Joback Method
cpg	355.36	J/mol×K	565.64	Joback Method
cpg	365.71	J/mol×K	592.72	Joback Method
cpg	375.72	J/mol×K	619.80	Joback Method
cpg	385.40	J/mol×K	646.88	Joback Method
cpg	394.73	J/mol×K	673.96	Joback Method
cpg	403.71	J/mol×K	701.04	Joback Method
dvisc	0.0059188	Pa×s	305.67	Joback Method

dvisc	0.0018987	Pa×s	344.49	Joback Method
dvisc	0.0007668	Pa×s	383.30	Joback Method
dvisc	0.0003659	Pa×s	422.12	Joback Method
dvisc	0.0001977	Pa×s	460.93	Joback Method
dvisc	0.0001176	Pa×s	499.75	Joback Method
dvisc	0.0000754	Pa×s	538.56	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C929726&Units=SI
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
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