Ethene, 1,1'-[oxybis(2,1-ethanediyloxy)]bis-

Other names:	Ether, bis[2-(vinyloxy)ethyl]
	Bis[2-(vinyloxy)ethyl] ether
	Diethylene glycol divinyl ether
	Divinylcarbitol
	3,6,9-Trioxaundeca-1,10-diene
	Divinyl ether diethylenglykolu
	Dvedeg
	NSC 6117
	1,1'-[oxybis(ethyleneoxy)]diethylene
Inchi:	InChI=1S/C8H14O3/c1-3-9-5-7-11-8-6-10-4-2/h3-4H,1-2,5-8H2
InchiKey:	SAMJGBVVQUEMGC-UHFFFAOYSA-N
Formula:	C8H14O3
SMILES:	C=COCCOCCOC=C
Mol. weight [g/mol]:	158.19
CAS:	764-99-8

Physical Properties

Property code	Value	Unit	Source
gf	-122.84	kJ/mol	Joback Method
hf	-354.25	kJ/mol	Joback Method
hfus	17.48	kJ/mol	Joback Method
hvap	39.29	kJ/mol	Joback Method
log10ws	-1.13		Crippen Method
logp	1.323		Crippen Method
mcvol	132.590	ml/mol	McGowan Method
pc	2621.78	kPa	Joback Method
tb	443.06	K	Joback Method
tc	613.76	K	Joback Method
tf	246.80 ± 0.60	K	NIST Webbook
vc	0.499	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	274.47	J/mol×K	443.06	Joback Method
cpg	285.62	J/mol×K	471.51	Joback Method
cpg	296.47	J/mol×K	499.96	Joback Method
cpg	307.00	J/mol×K	528.41	Joback Method
cpg	317.22	J/mol×K	556.86	Joback Method
cpg	327.11	J/mol×K	585.31	Joback Method
cpg	336.67	J/mol×K	613.76	Joback Method
dvisc	0.0018222	Pa×s	243.09	Joback Method
dvisc	0.0009564	Pa×s	276.42	Joback Method
dvisc	0.0005767	Pa×s	309.75	Joback Method
dvisc	0.0003836	Pa×s	343.07	Joback Method
dvisc	0.0002743	Pa×s	376.40	Joback Method
dvisc	0.0002071	Pa×s	409.73	Joback Method
dvisc	0.0001632	Pa×s	443.06	Joback Method
hvapt	50.00	kJ/mol	403.00	NIST Webbook

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=C764998&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
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
tb: Normal Boiling Point Temperature

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume