Hexanedioic acid, bis(2-ethoxyethyl) ester

Other names:	Adipic acid, bis(2-ethoxyethyl) ester
	Bis(2-ethoxyethyl) adipate
	Diethoxyethyl adipate
	Beta-ethoxyethyl adipate
	Bis(2-ethoxyethyl) hexanedioate
Inchi:	InChI=1S/C14H26O6/c1-3-17-9-11-19-13(15)7-5-6-8-14(16)20-12-10-18-4-2/h3-12H2,1-2
InchiKey:	NJEMMCIKSMMBDM-UHFFFAOYSA-N
Formula:	C14H26O6
SMILES:	CCOCCOC(=O)CCCCC(=O)OCCOCC
Mol. weight [g/mol]:	290.35
CAS:	109-44-4

Physical Properties

Property code	Value	Unit	Source
gf	-610.84	kJ/mol	Joback Method
hf	-1086.33	kJ/mol	Joback Method
hfus	39.97	kJ/mol	Joback Method
hvap	69.89	kJ/mol	Joback Method
log10ws	-1.58		Crippen Method
logp	1.706		Crippen Method
mcvol	234.740	ml/mol	McGowan Method
pc	1594.89	kPa	Joback Method
rinpol	1880.00		NIST Webbook
rinpol	1924.00		NIST Webbook
rinpol	1880.00		NIST Webbook
rinpol	1880.00		NIST Webbook
tb	717.14	K	Joback Method
tc	894.30	K	Joback Method
tf	436.32	K	Joback Method
vc	0.903	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	679.91	J/mol×K	717.14	Joback Method
cpg	748.61	J/mol×K	864.78	Joback Method
cpg	736.46	J/mol×K	835.25	Joback Method
cpg	723.50	J/mol×K	805.72	Joback Method
cpg	709.74	J/mol×K	776.19	Joback Method
cpg	695.21	J/mol×K	746.67	Joback Method
cpg	759.95	J/mol×K	894.30	Joback Method
dvisc	0.0000702	Pa×s	717.14	Joback Method
dvisc	0.0000905	Pa×s	670.34	Joback Method
dvisc	0.0001212	Pa×s	623.53	Joback Method
dvisc	0.0001702	Pa×s	576.73	Joback Method
dvisc	0.0002538	Pa×s	529.93	Joback Method
dvisc	0.0004090	Pa×s	483.12	Joback Method
dvisc	0.0007301	Pa×s	436.32	Joback Method

Sources

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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C109444&Units=SI

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