Benzene, 1,1'-(oxybis(2,1-ethanediyloxy))bis-

Other names: Bis(2-phenoxyethyl)ether
Inchi: InChI=1S/C16H18O3/c1-3-7-15(8-4-1)18-13-11-17-12-14-19-16-9-5-2-6-10-16/h1-10H,11
InchiKey: PICKZMGDVSSGSC-UHFFFAOYSA-N
Formula: C16H18O3
SMILES: c1ccc(OCCOCCOc2ccccc2)cc1
Mol. weight [g/mol]: 258.31
CAS: 622-87-7

Physical Properties

Property code	Value	Unit	Source
gf	-6.34	kJ/mol	Joback Method
hf	-297.17	kJ/mol	Joback Method
hfus	28.84	kJ/mol	Joback Method
hvap	62.99	kJ/mol	Joback Method
log10ws	-3.28		Crippen Method
logp	3.161		Crippen Method
mcvol	206.390	ml/mol	McGowan Method
pc	2177.49	kPa	Joback Method
tb	686.10	K	Joback Method
tc	907.13	K	Joback Method
tf	389.61	K	Joback Method
vc	0.769	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	554.27	J/mol×K	686.10	Joback Method
cpg	627.95	J/mol×K	870.29	Joback Method
cpg	615.49	J/mol×K	833.45	Joback Method
cpg	601.91	J/mol×K	796.62	Joback Method
cpg	587.19	J/mol×K	759.78	Joback Method
cpg	571.32	J/mol×K	722.94	Joback Method
cpg	639.32	J/mol×K	907.13	Joback Method
dvisc	0.0000735	Pa×s	686.10	Joback Method

dvisc	0.0000948	Pa×s	636.68	Joback Method
dvisc	0.0001276	Pa×s	587.27	Joback Method
dvisc	0.0001815	Pa×s	537.86	Joback Method
dvisc	0.0002771	Pa×s	488.44	Joback Method
dvisc	0.0004654	Pa×s	439.03	Joback Method
dvisc	0.0008916	Pa×s	389.61	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=C622877&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume