Benzene, 1,1'-[1,2-ethanediylbis(oxymethylene)]bis-

Other names: Ethane, 1,2-bis(benzyloxy)-
1,2-Dibenzyloxyethane

Inchi: InChI=1S/C16H18O2/c1-3-7-15(8-4-1)13-17-11-12-18-14-16-9-5-2-6-10-16/h1-10H,11-14

InchiKey: FPFHYKOBYMYVAN-UHFFFAOYSA-N

Formula: C16H18O2

SMILES: c1ccc(COCCOCc2ccccc2)cc1

Mol. weight [g/mol]: 242.31

CAS: 622-22-0

Physical Properties

Property code	Value	Unit	Source
gf	98.66	kJ/mol	Joback Method
hf	-164.95	kJ/mol	Joback Method
hfus	27.65	kJ/mol	Joback Method
hvap	60.58	kJ/mol	Joback Method
log10ws	-3.89		Crippen Method
logp	3.420		Crippen Method
mcvol	200.520	ml/mol	McGowan Method
pc	2212.45	kPa	Joback Method
tb	663.68	K	Joback Method
tc	887.52	K	Joback Method
tf	367.38	K	Joback Method
vc	0.751	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	526.88	J/mol×K	663.68	Joback Method
cpg	602.97	J/mol×K	850.21	Joback Method
cpg	590.01	J/mol×K	812.90	Joback Method
cpg	575.97	J/mol×K	775.60	Joback Method
cpg	560.79	J/mol×K	738.29	Joback Method
cpg	544.44	J/mol×K	700.99	Joback Method
cpg	614.87	J/mol×K	887.52	Joback Method

dvisc	0.0000943	Pa×s	663.68	Joback Method
dvisc	0.0001220	Pa×s	614.30	Joback Method
dvisc	0.0001651	Pa×s	564.91	Joback Method
dvisc	0.0002369	Pa×s	515.53	Joback Method
dvisc	0.0003668	Pa×s	466.15	Joback Method
dvisc	0.0006301	Pa×s	416.76	Joback Method
dvisc	0.0012516	Pa×s	367.38	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=C622220&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