Ethanol, 2-(2-phenoxyethoxy)-

Other names:	Diethylene glycol monophenyl ether
	Phenoxydiglycol
	Phenyl carbitol
	2-(2-Phenoxyethoxy)ethanol
	Diethylene glycolphenyl ether
	Fenylkarbitol
Inchi:	InChI=1S/C10H14O3/c11-6-7-12-8-9-13-10-4-2-1-3-5-10/h1-5,11H,6-9H2
InchiKey:	ZUAURMBNZUCEAF-UHFFFAOYSA-N
Formula:	C10H14O3
SMILES:	OCCOCCOc1ccccc1
Mol. weight [g/mol]:	182.22
CAS:	104-68-7

Physical Properties

Property code	Value	Unit	Source
gf	-201.09	kJ/mol	Joback Method
hf	-429.87	kJ/mol	Joback Method
hfus	22.16	kJ/mol	Joback Method
hvap	61.63	kJ/mol	Joback Method
log10ws	-1.20		Crippen Method
logp	1.074		Crippen Method
mcvol	145.610	ml/mol	McGowan Method
pc	3124.49	kPa	Joback Method
tb	591.90	K	Joback Method
tc	781.57	K	Joback Method
tf	334.16	K	Joback Method
vc	0.542	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	360.24	J/mol×K	591.90	Joback Method
cpg	372.32	J/mol×K	623.51	Joback Method
cpg	383.82	J/mol×K	655.12	Joback Method

cpg	394.72	J/mol×K	686.74	Joback Method
cpg	405.04	J/mol×K	718.35	Joback Method
cpg	414.79	J/mol×K	749.96	Joback Method
cpg	423.97	J/mol×K	781.57	Joback Method
dvisc	0.0041023	Pa×s	334.16	Joback Method
dvisc	0.0013552	Pa×s	377.12	Joback Method
dvisc	0.0005615	Pa×s	420.07	Joback Method
dvisc	0.0002740	Pa×s	463.03	Joback Method
dvisc	0.0001510	Pa×s	505.99	Joback Method
dvisc	0.0000914	Pa×s	548.94	Joback Method
dvisc	0.0000595	Pa×s	591.90	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C104687&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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

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