Benzenemethanol, «alpha»-(ethoxymethyl)-

Other names: «alpha»-(Ethoxymethyl)benzyl alcohol
Inchi: InChI=1S/C10H14O2/c1-2-12-8-10(11)9-6-4-3-5-7-9/h3-7,10-11H,2,8H2,1H3
InchiKey: XSBXONDDSWGYMG-UHFFFAOYSA-N
Formula: C10H14O2
SMILES: CCOCC(O)c1ccccc1
Mol. weight [g/mol]: 166.22
CAS: 22383-53-5

Physical Properties

Property code	Value	Unit	Source
gf	-98.53	kJ/mol	Joback Method
hf	-302.93	kJ/mol	Joback Method
hfus	17.45	kJ/mol	Joback Method
hvap	58.83	kJ/mol	Joback Method
log10ws	-1.92		Crippen Method
logp	1.756		Crippen Method
mcvol	139.740	ml/mol	McGowan Method
pc	3213.68	kPa	Joback Method
tb	569.04	K	Joback Method
tc	763.83	K	Joback Method
tf	296.93	K	Joback Method
vc	0.518	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.30	J/mol×K	569.04	Joback Method
cpg	348.87	J/mol×K	601.51	Joback Method
cpg	360.77	J/mol×K	633.97	Joback Method
cpg	372.02	J/mol×K	666.44	Joback Method
cpg	382.64	J/mol×K	698.90	Joback Method
cpg	392.65	J/mol×K	731.37	Joback Method
cpg	402.07	J/mol×K	763.83	Joback Method
dvisc	0.0122682	Pa×s	296.93	Joback Method

dvisc	0.0029883	Pa×s	342.28	Joback Method
dvisc	0.0010130	Pa×s	387.63	Joback Method
dvisc	0.0004307	Pa×s	432.99	Joback Method
dvisc	0.0002154	Pa×s	478.34	Joback Method
dvisc	0.0001214	Pa×s	523.69	Joback Method
dvisc	0.0000750	Pa×s	569.04	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C22383535&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

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