Ethane, 1-bromo-2,2-dipropoxy-

Other names: 1,1'-[(2-bromoethylidene)bis(oxy)]bispropane
Inchi: InChI=1S/C8H17BrO2/c1-3-5-10-8(7-9)11-6-4-2/h8H,3-7H2,1-2H3
InchiKey: YZXXNXIKOGVZPP-UHFFFAOYSA-N
Formula: C8H17BrO2
SMILES: CCCOC(CBr)OCCC
Mol. weight [g/mol]: 225.12
CAS: 61365-93-3

Physical Properties

Property code	Value	Unit	Source
gf	-181.64	kJ/mol	Joback Method
hf	-451.84	kJ/mol	Joback Method
hfus	20.61	kJ/mol	Joback Method
hvap	44.27	kJ/mol	Joback Method
log10ws	-2.38		Crippen Method
logp	2.561		Crippen Method
mcvol	152.820	ml/mol	McGowan Method
pc	2648.83	kPa	Joback Method
tb	493.00	K	Joback Method
tc	676.37	K	Joback Method
tf	269.18	K	Joback Method
vc	0.576	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	325.92	J/mol×K	493.00	Joback Method
cpg	338.73	J/mol×K	523.56	Joback Method
cpg	351.08	J/mol×K	554.12	Joback Method
cpg	362.96	J/mol×K	584.68	Joback Method
cpg	374.37	J/mol×K	615.24	Joback Method
cpg	385.32	J/mol×K	645.81	Joback Method
cpg	395.80	J/mol×K	676.37	Joback Method
dvisc	0.0030762	Pa×s	269.18	Joback Method

dvisc	0.0014717	Pa×s	306.48	Joback Method
dvisc	0.0008263	Pa×s	343.79	Joback Method
dvisc	0.0005194	Pa×s	381.09	Joback Method
dvisc	0.0003547	Pa×s	418.39	Joback Method
dvisc	0.0002578	Pa×s	455.70	Joback Method
dvisc	0.0001967	Pa×s	493.00	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=C61365933&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

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