2-(2-(2-Ethoxyethoxy)ethoxy)ethyl isobutyl carbonate

Inchi: InChI=1S/C13H26O6/c1-4-15-5-6-16-7-8-17-9-10-18-13(14)19-11-12(2)3/h12H,4-11H2,1

InchiKey: PFGLQBURDRYYJJ-UHFFFAOYSA-N

Formula: C13H26O6

SMILES: CCOCCOCCOCCOC(=O)OCC(C)C

Mol. weight [g/mol]: 278.34

Physical Properties

Property code	Value	Unit	Source
gf	-597.78	kJ/mol	Joback Method
hf	-1090.61	kJ/mol	Joback Method
hfus	33.44	kJ/mol	Joback Method
hvap	62.94	kJ/mol	Joback Method
log10ws	-1.21		Crippen Method
logp	1.865		Crippen Method
mcvol	224.950	ml/mol	McGowan Method
pc	1625.91	kPa	Joback Method
rinpol	1766.00		NIST Webbook
rinpol	1766.00		NIST Webbook
tb	662.37	K	Joback Method
tc	834.09	K	Joback Method
tf	382.35	K	Joback Method
vc	0.854	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	630.66	J/mol×K	662.37	Joback Method
cpg	646.56	J/mol×K	690.99	Joback Method
cpg	661.79	J/mol×K	719.61	Joback Method
cpg	676.35	J/mol×K	748.23	Joback Method
cpg	690.21	J/mol×K	776.85	Joback Method
cpg	703.35	J/mol×K	805.47	Joback Method
cpg	715.75	J/mol×K	834.09	Joback Method
dvisc	0.0008567	Pa×s	382.35	Joback Method

dvisc	0.0004293	Pa×s	429.02	Joback Method
dvisc	0.0002463	Pa×s	475.69	Joback Method
dvisc	0.0001561	Pa×s	522.36	Joback Method
dvisc	0.0001066	Pa×s	569.03	Joback Method
dvisc	0.0000771	Pa×s	615.70	Joback Method
dvisc	0.0000584	Pa×s	662.37	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U378287&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume