Isobutyl (2-(2-(2-methoxyethoxy)ethoxy)ethyl) carbonate

Inchi: InChI=1S/C12H24O6/c1-11(2)10-18-12(13)17-9-8-16-7-6-15-5-4-14-3/h11H,4-10H2,1-3H

InchiKey: XNXZQLXVMCGXTG-UHFFFAOYSA-N

Formula: C12H24O6

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

Mol. weight [g/mol]: 264.32

Physical Properties

Property code	Value	Unit	Source
gf	-606.20	kJ/mol	Joback Method
hf	-1069.97	kJ/mol	Joback Method
hfus	30.85	kJ/mol	Joback Method
hvap	60.71	kJ/mol	Joback Method
log10ws	-0.79		Crippen Method
logp	1.475		Crippen Method
mcvol	210.860	ml/mol	McGowan Method
pc	1759.49	kPa	Joback Method
rinpol	1706.00		NIST Webbook
tb	639.49	K	Joback Method
tc	811.46	K	Joback Method
tf	371.08	K	Joback Method
vc	0.797	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	576.77	J/mol×K	639.49	Joback Method
cpg	592.09	J/mol×K	668.15	Joback Method
cpg	606.81	J/mol×K	696.81	Joback Method
cpg	620.91	J/mol×K	725.47	Joback Method
cpg	634.37	J/mol×K	754.13	Joback Method
cpg	647.17	J/mol×K	782.80	Joback Method
cpg	659.29	J/mol×K	811.46	Joback Method
dvisc	0.0009341	Pa×s	371.08	Joback Method
dvisc	0.0004747	Pa×s	415.81	Joback Method

dvisc	0.0002751	Pa×s	460.55	Joback Method
dvisc	0.0001756	Pa×s	505.28	Joback Method
dvisc	0.0001206	Pa×s	550.02	Joback Method
dvisc	0.0000876	Pa×s	594.75	Joback Method
dvisc	0.0000666	Pa×s	639.49	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U378285&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