Isobutyl (1-((1-methoxypropan-2-yl)oxy)propan-2-yl) carbonate

Inchi: InChI=1S/C12H24O5/c1-9(2)6-16-12(13)17-11(4)8-15-10(3)7-14-5/h9-11H,6-8H2,1-5H3
InchiKey: JZARTOGQMAIVPJ-UHFFFAOYSA-N
Formula: C12H24O5
SMILES: COCC(C)OCC(C)OC(=O)OCC(C)C
Mol. weight [g/mol]: 248.32

Physical Properties

Property code	Value	Unit	Source
gf	-506.08	kJ/mol	Joback Method
hf	-948.31	kJ/mol	Joback Method
hfus	22.62	kJ/mol	Joback Method
hvap	57.53	kJ/mol	Joback Method
log10ws	-1.93		Crippen Method
logp	2.236		Crippen Method
mcvol	204.990	ml/mol	McGowan Method
pc	1809.23	kPa	Joback Method
rinpol	1466.00		NIST Webbook
tb	616.19	K	Joback Method
tc	793.60	K	Joback Method
tf	318.85	K	Joback Method
vc	0.767	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	549.28	J/mol×K	616.19	Joback Method
cpg	622.80	J/mol×K	764.03	Joback Method
cpg	609.44	J/mol×K	734.47	Joback Method
cpg	595.39	J/mol×K	704.90	Joback Method
cpg	580.67	J/mol×K	675.33	Joback Method
cpg	565.30	J/mol×K	645.76	Joback Method
cpg	635.46	J/mol×K	793.60	Joback Method
dvisc	0.0000750	Pa×s	616.19	Joback Method
dvisc	0.0001037	Pa×s	566.63	Joback Method

dvisc	0.0001528	Pa×s	517.08	Joback Method
dvisc	0.0002442	Pa×s	467.52	Joback Method
dvisc	0.0004363	Pa×s	417.96	Joback Method
dvisc	0.0009112	Pa×s	368.41	Joback Method
dvisc	0.0023927	Pa×s	318.85	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=U378288&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume