Isobutyl (2-methoxyethyl) carbonate

Inchi: InChI=1S/C8H16O4/c1-7(2)6-12-8(9)11-5-4-10-3/h7H,4-6H2,1-3H3
InchiKey: OWZMVPOOMCGUHH-UHFFFAOYSA-N
Formula: C8H16O4
SMILES: COCCOC(=O)OCC(C)C
Mol. weight [g/mol]: 176.21

Physical Properties

Property code	Value	Unit	Source
gf	-429.88	kJ/mol	Joback Method
hf	-722.97	kJ/mol	Joback Method
hfus	18.12	kJ/mol	Joback Method
hvap	46.99	kJ/mol	Joback Method
log10ws	-0.94		Crippen Method
logp	1.442		Crippen Method
mcvol	142.760	ml/mol	McGowan Method
pc	2587.22	kPa	Joback Method
rinpol	1154.00		NIST Webbook
tb	503.13	K	Joback Method
tc	680.70	K	Joback Method
tf	281.54	K	Joback Method
vc	0.537	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	328.22	J/mol×K	503.13	Joback Method
cpg	340.49	J/mol×K	532.73	Joback Method
cpg	352.40	J/mol×K	562.32	Joback Method
cpg	363.94	J/mol×K	591.92	Joback Method
cpg	375.08	J/mol×K	621.51	Joback Method
cpg	385.82	J/mol×K	651.11	Joback Method
cpg	396.14	J/mol×K	680.70	Joback Method
dvisc	0.0024361	Pa×s	281.54	Joback Method
dvisc	0.0012025	Pa×s	318.47	Joback Method

dvisc	0.0006874	Pa×s	355.40	Joback Method
dvisc	0.0004366	Pa×s	392.34	Joback Method
dvisc	0.0002998	Pa×s	429.27	Joback Method
dvisc	0.0002185	Pa×s	466.20	Joback Method
dvisc	0.0001668	Pa×s	503.13	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U378283&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume