Carbonic acid, 2-methoxyethyl cyclohexylmethyl ester

Inchi: InChI=1S/C11H20O4/c1-13-7-8-14-11(12)15-9-10-5-3-2-4-6-10/h10H,2-9H2,1H3

InchiKey: ARLJOBDPMKDKJM-UHFFFAOYSA-N

Formula: C11H20O4

SMILES: COCCOC(=O)OCC1CCCCC1

Mol. weight [g/mol]: 216.27

Physical Properties

Property code	Value	Unit	Source
gf	-377.73	kJ/mol	Joback Method
hf	-725.29	kJ/mol	Joback Method
hfus	21.24	kJ/mol	Joback Method
hvap	54.48	kJ/mol	Joback Method
log10ws	-2.10		Crippen Method
logp	2.366		Crippen Method
mcvol	174.170	ml/mol	McGowan Method
pc	2363.37	kPa	Joback Method
rinpol	1555.00		NIST Webbook
tb	591.76	K	Joback Method
tc	790.45	K	Joback Method
tf	337.73	K	Joback Method
vc	0.644	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	459.71	J/mol×K	591.76	Joback Method
cpg	477.42	J/mol×K	624.88	Joback Method
cpg	494.27	J/mol×K	657.99	Joback Method
cpg	510.27	J/mol×K	691.11	Joback Method
cpg	525.40	J/mol×K	724.22	Joback Method
cpg	539.65	J/mol×K	757.34	Joback Method
cpg	553.02	J/mol×K	790.45	Joback Method
dvisc	0.0019873	Pa×s	337.73	Joback Method
dvisc	0.0009997	Pa×s	380.07	Joback Method

dvisc	0.0005772	Pa×s	422.41	Joback Method
dvisc	0.0003683	Pa×s	464.75	Joback Method
dvisc	0.0002533	Pa×s	507.08	Joback Method
dvisc	0.0001846	Pa×s	549.42	Joback Method
dvisc	0.0001407	Pa×s	591.76	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U357870&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