Carbonic acid, 2-methoxyethyl cyclohexyl ester

Inchi: InChI=1S/C10H18O4/c1-12-7-8-13-10(11)14-9-5-3-2-4-6-9/h9H,2-8H2,1H3
InchiKey: KCEGKWREMWDFQX-UHFFFAOYSA-N
Formula: C10H18O4
SMILES: COCCOC(=O)OC1CCCCC1
Mol. weight [g/mol]: 202.25

Physical Properties

Property code	Value	Unit	Source
gf	-386.15	kJ/mol	Joback Method
hf	-704.65	kJ/mol	Joback Method
hfus	18.65	kJ/mol	Joback Method
hvap	52.26	kJ/mol	Joback Method
log10ws	-2.03		Crippen Method
logp	2.119		Crippen Method
mcvol	160.080	ml/mol	McGowan Method
pc	2600.43	kPa	Joback Method
rinpol	1453.00		NIST Webbook
tb	568.88	K	Joback Method
tc	770.42	K	Joback Method
tf	326.46	K	Joback Method
vc	0.589	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	409.27	J/mol×K	568.88	Joback Method
cpg	426.35	J/mol×K	602.47	Joback Method
cpg	442.63	J/mol×K	636.06	Joback Method
cpg	458.11	J/mol×K	669.65	Joback Method
cpg	472.78	J/mol×K	703.24	Joback Method
cpg	486.61	J/mol×K	736.83	Joback Method
cpg	499.60	J/mol×K	770.42	Joback Method
dvisc	0.0021026	Pa×s	326.46	Joback Method
dvisc	0.0010749	Pa×s	366.86	Joback Method

dvisc	0.0006278	Pa×s	407.27	Joback Method
dvisc	0.0004040	Pa×s	447.67	Joback Method
dvisc	0.0002797	Pa×s	488.07	Joback Method
dvisc	0.0002048	Pa×s	528.48	Joback Method
dvisc	0.0001568	Pa×s	568.88	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U357867&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

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