Carbonic acid, (1R)-(-)-menthyl butyl ester

Inchi: InChI=1S/C15H28O3/c1-5-6-9-17-15(16)18-14-10-13(11(2)3)8-7-12(14)4/h11-14H,5-10H
InchiKey: AWUDZFMWMSQPTA-UHFFFAOYSA-N
Formula: C15H28O3
SMILES: CCCCOC(=O)OC1CC(C(C)C)CCC1C
Mol. weight [g/mol]: 256.38

Physical Properties

Property code	Value	Unit	Source
gf	-256.91	kJ/mol	Joback Method
hf	-721.59	kJ/mol	Joback Method
hfus	29.04	kJ/mol	Joback Method
hvap	59.97	kJ/mol	Joback Method
log10ws	-4.31		Crippen Method
logp	4.401		Crippen Method
mcvol	224.660	ml/mol	McGowan Method
pc	1623.29	kPa	Joback Method
rinpol	1646.00		NIST Webbook
rinpol	1646.00		NIST Webbook
tb	651.08	K	Joback Method
tc	844.83	K	Joback Method
tf	337.10	K	Joback Method
vc	0.843	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	648.69	J/mol×K	651.08	Joback Method
cpg	669.71	J/mol×K	683.37	Joback Method
cpg	689.63	J/mol×K	715.66	Joback Method
cpg	708.47	J/mol×K	747.95	Joback Method
cpg	726.22	J/mol×K	780.24	Joback Method
cpg	742.89	J/mol×K	812.54	Joback Method
cpg	758.46	J/mol×K	844.83	Joback Method
dvisc	0.0021819	Pa×s	337.10	Joback Method

dvisc	0.0010313	Pa×s	389.43	Joback Method
dvisc	0.0005821	Pa×s	441.76	Joback Method
dvisc	0.0003709	Pa×s	494.09	Joback Method
dvisc	0.0002577	Pa×s	546.42	Joback Method
dvisc	0.0001907	Pa×s	598.75	Joback Method
dvisc	0.0001482	Pa×s	651.08	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U392433&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