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

Inchi: InChI=1S/C15H28O3/c1-10(2)9-17-15(16)18-14-8-13(11(3)4)7-6-12(14)5/h10-14H,6-9H2
InchiKey: PGHOXPDMVFUFQE-UHFFFAOYSA-N
Formula: C15H28O3
SMILES: CC(C)COC(=O)OC1CC(C(C)C)CCC1C
Mol. weight [g/mol]: 256.38

Physical Properties

Property code	Value	Unit	Source
gf	-259.35	kJ/mol	Joback Method
hf	-726.87	kJ/mol	Joback Method
hfus	25.51	kJ/mol	Joback Method
hvap	59.59	kJ/mol	Joback Method
log10ws	-4.07		Crippen Method
logp	4.256		Crippen Method
mcvol	224.660	ml/mol	McGowan Method
pc	1633.81	kPa	Joback Method
rinpol	1598.00		NIST Webbook
rinpol	1598.00		NIST Webbook
tb	650.64	K	Joback Method
tc	847.76	K	Joback Method
tf	322.10	K	Joback Method
vc	0.837	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	649.07	J/mol×K	650.64	Joback Method
cpg	744.82	J/mol×K	814.91	Joback Method
cpg	727.94	J/mol×K	782.06	Joback Method
cpg	709.93	J/mol×K	749.20	Joback Method
cpg	690.78	J/mol×K	716.35	Joback Method
cpg	670.49	J/mol×K	683.49	Joback Method
cpg	760.56	J/mol×K	847.76	Joback Method
dvisc	0.0001376	Pa×s	650.64	Joback Method

dvisc	0.0001805	Pa×s	595.88	Joback Method
dvisc	0.0002499	Pa×s	541.13	Joback Method
dvisc	0.0003725	Pa×s	486.37	Joback Method
dvisc	0.0006142	Pa×s	431.61	Joback Method
dvisc	0.0011714	Pa×s	376.86	Joback Method
dvisc	0.0027824	Pa×s	322.10	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=U392448&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