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

Inchi: InChI=1S/C21H38O3/c1-13(2)17-9-7-15(5)19(11-17)23-21(22)24-20-12-18(14(3)4)10-8-1

InchiKey: FJAKXQSTAVGTSC-UHFFFAOYSA-N

Formula: C21H38O3

SMILES: CC(C)C1CCC(C)C(OC(=O)OC2CC(C(C)C)CCC2C)C1

Mol. weight [g/mol]: 338.52

Physical Properties

Property code	Value	Unit	Source
gf	-199.80	kJ/mol	Joback Method
hf	-837.07	kJ/mol	Joback Method
hfus	35.03	kJ/mol	Joback Method
hvap	72.75	kJ/mol	Joback Method
log10ws	-6.10		Crippen Method
logp	6.061		Crippen Method
mcvol	298.340	ml/mol	McGowan Method
pc	1180.09	kPa	Joback Method
rinpol	2151.00		NIST Webbook
rinpol	2151.00		NIST Webbook
tb	798.13	K	Joback Method
tc	1008.87	K	Joback Method
tf	388.62	K	Joback Method
vc	1.103	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1010.83	J/mol×K	798.13	Joback Method
cpg	1115.04	J/mol×K	973.75	Joback Method
cpg	1097.93	J/mol×K	938.63	Joback Method
cpg	1078.95	J/mol×K	903.50	Joback Method
cpg	1058.12	J/mol×K	868.38	Joback Method
cpg	1035.41	J/mol×K	833.25	Joback Method
cpg	1130.30	J/mol×K	1008.87	Joback Method
dvisc	0.0001144	Pa×s	798.13	Joback Method

dvisc	0.0001465	Pa×s	729.88	Joback Method
dvisc	0.0001975	Pa×s	661.63	Joback Method
dvisc	0.0002851	Pa×s	593.38	Joback Method
dvisc	0.0004527	Pa×s	525.12	Joback Method
dvisc	0.0008255	Pa×s	456.87	Joback Method
dvisc	0.0018588	Pa×s	388.62	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U392447&Units=SI

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