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

Inchi: InChI=1S/C20H38O3/c1-5-6-7-8-9-10-11-14-22-20(21)23-19-15-18(16(2)3)13-12-17(19)4
InchiKey: DLMWJBSSSYXANL-UHFFFAOYSA-N
Formula: C20H38O3
SMILES: CCCCCCCCCOC(=O)OC1CC(C(C)C)CCC1C
Mol. weight [g/mol]: 326.51

Physical Properties

Property code	Value	Unit	Source
gf	-214.81	kJ/mol	Joback Method
hf	-824.79	kJ/mol	Joback Method
hfus	41.98	kJ/mol	Joback Method
hvap	71.10	kJ/mol	Joback Method
log10ws	-6.40		Crippen Method
logp	6.351		Crippen Method
mcvol	295.110	ml/mol	McGowan Method
pc	1139.80	kPa	Joback Method
rinpol	2179.00		NIST Webbook
rinpol	2179.00		NIST Webbook
tb	765.48	K	Joback Method
tc	954.07	K	Joback Method
tf	393.45	K	Joback Method
vc	1.123	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	944.61	J/mol×K	765.48	Joback Method
cpg	966.32	J/mol×K	796.91	Joback Method
cpg	986.75	J/mol×K	828.34	Joback Method
cpg	1005.90	J/mol×K	859.77	Joback Method
cpg	1023.79	J/mol×K	891.20	Joback Method
cpg	1040.42	J/mol×K	922.64	Joback Method
cpg	1055.81	J/mol×K	954.07	Joback Method
dvisc	0.0015294	Pa×s	393.45	Joback Method

dvisc	0.0006781	Pa×s	455.46	Joback Method
dvisc	0.0003653	Pa×s	517.46	Joback Method
dvisc	0.0002247	Pa×s	579.47	Joback Method
dvisc	0.0001518	Pa×s	641.47	Joback Method
dvisc	0.0001099	Pa×s	703.48	Joback Method
dvisc	0.0000838	Pa×s	765.48	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=U392438&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