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

Inchi: InChI=1S/C23H44O3/c1-5-6-7-8-9-10-11-12-13-14-17-25-23(24)26-22-18-21(19(2)3)16-1
InchiKey: WAESBELRAYYZQT-UHFFFAOYSA-N
Formula: C23H44O3
SMILES: CCCCCCCCCCCCOC(=O)OC1CC(C(C)C)CCC1C
Mol. weight [g/mol]: 368.59

Physical Properties

Property code	Value	Unit	Source
gf	-189.55	kJ/mol	Joback Method
hf	-886.71	kJ/mol	Joback Method
hfus	49.75	kJ/mol	Joback Method
hvap	77.78	kJ/mol	Joback Method
log10ws	-7.66		Crippen Method
logp	7.521		Crippen Method
mcvol	337.380	ml/mol	McGowan Method
pc	946.75	kPa	Joback Method
rinpol	2500.00		NIST Webbook
rinpol	2500.00		NIST Webbook
tb	834.12	K	Joback Method
tc	1026.28	K	Joback Method
tf	427.26	K	Joback Method
vc	1.290	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1132.53	J/mol×K	834.12	Joback Method
cpg	1154.52	J/mol×K	866.15	Joback Method
cpg	1175.05	J/mol×K	898.17	Joback Method
cpg	1194.14	J/mol×K	930.20	Joback Method
cpg	1211.82	J/mol×K	962.23	Joback Method
cpg	1228.10	J/mol×K	994.25	Joback Method
cpg	1243.00	J/mol×K	1026.28	Joback Method
dvisc	0.0011474	Pa×s	427.26	Joback Method

dvisc	0.0004933	Pa×s	495.07	Joback Method
dvisc	0.0002599	Pa×s	562.88	Joback Method
dvisc	0.0001572	Pa×s	630.69	Joback Method
dvisc	0.0001048	Pa×s	698.50	Joback Method
dvisc	0.0000751	Pa×s	766.31	Joback Method
dvisc	0.0000568	Pa×s	834.12	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U392441&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

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