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

Inchi: InChI=1S/C24H46O3/c1-5-6-7-8-9-10-11-12-13-14-15-18-26-24(25)27-23-19-22(20(2)3)1
InchiKey: HENCOCBUHCDCOT-UHFFFAOYSA-N
Formula: C24H46O3
SMILES: CCCCCCCCCCCCCOC(=O)OC1CC(C(C)C)CCC1C
Mol. weight [g/mol]: 382.62

Physical Properties

Property code	Value	Unit	Source
gf	-181.13	kJ/mol	Joback Method
hf	-907.35	kJ/mol	Joback Method
hfus	52.34	kJ/mol	Joback Method
hvap	80.01	kJ/mol	Joback Method
log10ws	-8.08		Crippen Method
logp	7.911		Crippen Method
mcvol	351.470	ml/mol	McGowan Method
pc	893.20	kPa	Joback Method
rinpol	2606.00		NIST Webbook
rinpol	2606.00		NIST Webbook
tb	857.00	K	Joback Method
tc	1051.78	K	Joback Method
tf	438.53	K	Joback Method
vc	1.347	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1196.43	J/mol×K	857.00	Joback Method
cpg	1291.88	J/mol×K	1019.32	Joback Method
cpg	1275.76	J/mol×K	986.85	Joback Method
cpg	1258.17	J/mol×K	954.39	Joback Method
cpg	1239.11	J/mol×K	921.93	Joback Method
cpg	1218.53	J/mol×K	889.46	Joback Method
cpg	1306.56	J/mol×K	1051.78	Joback Method
dvisc	0.0000496	Pa×s	857.00	Joback Method

dvisc	0.0000657	Pa×s	787.25	Joback Method
dvisc	0.0000920	Pa×s	717.51	Joback Method
dvisc	0.0001385	Pa×s	647.76	Joback Method
dvisc	0.0002302	Pa×s	578.02	Joback Method
dvisc	0.0004399	Pa×s	508.27	Joback Method
dvisc	0.0010327	Pa×s	438.53	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U392442&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