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

Inchi: InChI=1S/C26H50O3/c1-5-6-7-8-9-10-11-12-13-14-15-16-17-20-28-26(27)29-25-21-24(2

InchiKey: PAXGVXUQCDTBNO-UHFFFAOYSA-N

Formula: C26H50O3

SMILES: CCCCCCCCCCCCCCCCOC(=O)OC1CC(C(C)C)CCC1C

Mol. weight [g/mol]: 410.67

Physical Properties

Property code	Value	Unit	Source
gf	-164.29	kJ/mol	Joback Method
hf	-948.63	kJ/mol	Joback Method
hfus	57.52	kJ/mol	Joback Method
hvap	84.46	kJ/mol	Joback Method
log10ws	-8.92		Crippen Method
logp	8.692		Crippen Method
mcvol	379.650	ml/mol	McGowan Method
pc	798.89	kPa	Joback Method
rinpol	2814.00		NIST Webbook
rinpol	2814.00		NIST Webbook
tb	902.76	K	Joback Method
tc	1105.30	K	Joback Method
tf	461.07	K	Joback Method
vc	1.458	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1325.69	J/mol×K	902.76	Joback Method
cpg	1420.94	J/mol×K	1071.54	Joback Method
cpg	1405.19	J/mol×K	1037.78	Joback Method
cpg	1387.83	J/mol×K	1004.03	Joback Method
cpg	1368.81	J/mol×K	970.27	Joback Method
cpg	1348.10	J/mol×K	936.52	Joback Method
cpg	1435.09	J/mol×K	1105.30	Joback Method
dvisc	0.0000375	Pa×s	902.76	Joback Method

dvisc	0.0000499	Pa×s	829.14	Joback Method
dvisc	0.0000703	Pa×s	755.53	Joback Method
dvisc	0.0001066	Pa×s	681.91	Joback Method
dvisc	0.0001788	Pa×s	608.30	Joback Method
dvisc	0.0003460	Pa×s	534.69	Joback Method
dvisc	0.0008264	Pa×s	461.07	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U392443&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