Carbonic acid, decyl vinyl ester

Inchi: InChI=1S/C13H24O3/c1-3-5-6-7-8-9-10-11-12-16-13(14)15-4-2/h4H,2-3,5-12H2,1H3
InchiKey: GZGZNGGPIHHKHI-UHFFFAOYSA-N
Formula: C13H24O3
SMILES: C=COC(=O)OCCCCCCCCCC
Mol. weight [g/mol]: 228.33

Physical Properties

Property code	Value	Unit	Source
gf	-192.50	kJ/mol	Joback Method
hf	-563.24	kJ/mol	Joback Method
hfus	32.12	kJ/mol	Joback Method
hvap	55.43	kJ/mol	Joback Method
log10ws	-4.54		Crippen Method
logp	4.424		Crippen Method
mcvol	203.040	ml/mol	McGowan Method
pc	1743.37	kPa	Joback Method
rinpol	1512.00		NIST Webbook
rinpol	1512.00		NIST Webbook
tb	592.23	K	Joback Method
tc	763.38	K	Joback Method
tf	328.90	K	Joback Method
vc	0.786	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	522.30	J/mol×K	592.23	Joback Method
cpg	537.88	J/mol×K	620.75	Joback Method
cpg	552.83	J/mol×K	649.28	Joback Method
cpg	567.16	J/mol×K	677.80	Joback Method
cpg	580.87	J/mol×K	706.33	Joback Method
cpg	593.97	J/mol×K	734.85	Joback Method
cpg	606.47	J/mol×K	763.38	Joback Method
dvisc	0.0019778	Pa×s	328.90	Joback Method

dvisc	0.0009807	Pa×s	372.79	Joback Method
dvisc	0.0005637	Pa×s	416.68	Joback Method
dvisc	0.0003601	Pa×s	460.56	Joback Method
dvisc	0.0002487	Pa×s	504.45	Joback Method
dvisc	0.0001822	Pa×s	548.34	Joback Method
dvisc	0.0001398	Pa×s	592.23	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U383257&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

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