

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)OCCCCCCCCC
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
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tb	592.23	K	Joback Method
tc	763.38	K	Joback Method
tf	328.90	K	Joback Method
vc	0.786	m ³ /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	Paxs	328.90	Joback Method

dvisc	0.0009807	Paxs	372.79	Joback Method
dvisc	0.0005637	Paxs	416.68	Joback Method
dvisc	0.0003601	Paxs	460.56	Joback Method
dvisc	0.0002487	Paxs	504.45	Joback Method
dvisc	0.0001822	Paxs	548.34	Joback Method
dvisc	0.0001398	Paxs	592.23	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U383257&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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