

Carbonic acid, tridecyl vinyl ester

Inchi: InChI=1S/C16H30O3/c1-3-5-6-7-8-9-10-11-12-13-14-15-19-16(17)18-4-2/h4H,2-3,5-15H
InchiKey: WPDZIBYJUJTVSC-UHFFFAOYSA-N
Formula: C16H30O3
SMILES: C=COC(=O)OCCCCCCCCCCCCC
Mol. weight [g/mol]: 270.41

Physical Properties

Property code	Value	Unit	Source
gf	-167.24	kJ/mol	Joback Method
hf	-625.16	kJ/mol	Joback Method
hfus	39.89	kJ/mol	Joback Method
hvap	62.11	kJ/mol	Joback Method
log10ws	-5.80		Crippen Method
logp	5.594		Crippen Method
mvol	245.310	ml/mol	McGowan Method
pc	1389.18	kPa	Joback Method
rinpol	1804.00		NIST Webbook
rinpol	1804.00		NIST Webbook
tb	660.87	K	Joback Method
tc	830.71	K	Joback Method
tf	362.71	K	Joback Method
vc	0.955	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	683.38	J/molxK	660.87	Joback Method
cpg	700.56	J/molxK	689.18	Joback Method
cpg	717.00	J/molxK	717.48	Joback Method
cpg	732.69	J/molxK	745.79	Joback Method
cpg	747.66	J/molxK	774.10	Joback Method
cpg	761.91	J/molxK	802.40	Joback Method
cpg	775.46	J/molxK	830.71	Joback Method
dvisc	0.0016121	Paxs	362.71	Joback Method

dvisc	0.0007654	Paxs	412.40	Joback Method
dvisc	0.0004265	Paxs	462.10	Joback Method
dvisc	0.0002663	Paxs	511.79	Joback Method
dvisc	0.0001807	Paxs	561.48	Joback Method
dvisc	0.0001306	Paxs	611.18	Joback Method
dvisc	0.0000991	Paxs	660.87	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U382547&Units=SI

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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