Carbonic acid, pentadecyl prop-1-en-2-yl ester

Inchi: InChI=1S/C19H36O3/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-21-19(20)22-18(2)3/h2,4-
InchiKey: CENJFPLALMNWHJ-UHFFFAOYSA-N
Formula: C19H36O3
SMILES: C=C(C)OC(=O)OCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 312.49

Physical Properties

Property code	Value	Unit	Source
gf	-150.53	kJ/mol	Joback Method
hf	-696.87	kJ/mol	Joback Method
hfus	46.35	kJ/mol	Joback Method
hvap	68.86	kJ/mol	Joback Method
log10ws	-7.05		Crippen Method
logp	6.764		Crippen Method
mcvol	287.580	ml/mol	McGowan Method
pc	1136.73	kPa	Joback Method
rinpol	2091.00		NIST Webbook
rinpol	2091.00		NIST Webbook
tb	729.39	K	Joback Method
tc	902.98	K	Joback Method
tf	382.56	K	Joback Method
vc	1.123	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	855.59	J/mol×K	729.39	Joback Method
cpg	874.23	J/mol×K	758.32	Joback Method
cpg	891.99	J/mol×K	787.25	Joback Method
cpg	908.86	J/mol×K	816.18	Joback Method
cpg	924.89	J/mol×K	845.11	Joback Method
cpg	940.07	J/mol×K	874.05	Joback Method
cpg	954.43	J/mol×K	902.98	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U382910&Units=SI

Legend

cpg:	Ideal gas heat capacity
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