Carbonic acid, eicosyl vinyl ester

Inchi: InChI=1S/C23H44O3/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-26-23(24
InchiKey: ATKGMLUBBPOBFK-UHFFFAOYSA-N
Formula: C23H44O3
SMILES: C=COC(=O)OCCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 368.59

Physical Properties

Property code	Value	Unit	Source
gf	-108.30	kJ/mol	Joback Method
hf	-769.64	kJ/mol	Joback Method
hfus	58.02	kJ/mol	Joback Method
hvap	77.69	kJ/mol	Joback Method
log10ws	-8.73		Crippen Method
logp	8.325		Crippen Method
mcvol	343.940	ml/mol	McGowan Method
pc	888.41	kPa	Joback Method
rinpol	2497.00		NIST Webbook
rinpol	2497.00		NIST Webbook
tb	821.03	K	Joback Method
tc	1005.40	K	Joback Method
tf	441.60	K	Joback Method
vc	1.347	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1099.94	J/mol×K	821.03	Joback Method
cpg	1120.34	J/mol×K	851.76	Joback Method
cpg	1139.62	J/mol×K	882.49	Joback Method
cpg	1157.79	J/mol×K	913.21	Joback Method
cpg	1174.90	J/mol×K	943.94	Joback Method
cpg	1190.95	J/mol×K	974.67	Joback Method
cpg	1206.00	J/mol×K	1005.40	Joback Method
dvisc	0.0008045	Pa×s	441.60	Joback Method

dvisc	0.0003533	Pa×s	504.84	Joback Method
dvisc	0.0001863	Pa×s	568.08	Joback Method
dvisc	0.0001117	Pa×s	631.32	Joback Method
dvisc	0.0000735	Pa×s	694.55	Joback Method
dvisc	0.0000519	Pa×s	757.79	Joback Method
dvisc	0.0000386	Pa×s	821.03	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=U382543&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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