Carbonic acid, but-3-en-1-yl tridecyl ester

Inchi: InChI=1S/C18H34O3/c1-3-5-7-8-9-10-11-12-13-14-15-17-21-18(19)20-16-6-4-2/h4H,2-3,
InchiKey: FFMYCKRHAJEDDC-UHFFFAOYSA-N
Formula: C18H34O3
SMILES: C=CCCOC(=O)OCCCCCCCCCCCCC
Mol. weight [g/mol]: 298.46

Physical Properties

Property code	Value	Unit	Source
gf	-150.40	kJ/mol	Joback Method
hf	-666.44	kJ/mol	Joback Method
hfus	45.07	kJ/mol	Joback Method
hvap	66.56	kJ/mol	Joback Method
log10ws	-6.14		Crippen Method
logp	6.027		Crippen Method
mcvol	273.490	ml/mol	McGowan Method
pc	1209.83	kPa	Joback Method
rinpol	2019.00		NIST Webbook
rinpol	2019.00		NIST Webbook
tb	706.63	K	Joback Method
tc	877.65	K	Joback Method
tf	385.25	K	Joback Method
vc	1.067	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	797.30	J/mol×K	706.63	Joback Method
cpg	879.54	J/mol×K	849.14	Joback Method
cpg	864.71	J/mol×K	820.64	Joback Method
cpg	849.08	J/mol×K	792.14	Joback Method
cpg	832.64	J/mol×K	763.64	Joback Method
cpg	815.39	J/mol×K	735.13	Joback Method
cpg	893.61	J/mol×K	877.65	Joback Method
dvisc	0.0000770	Pa×s	706.63	Joback Method

dvisc	0.0001021	Pa×s	653.07	Joback Method
dvisc	0.0001424	Pa×s	599.50	Joback Method
dvisc	0.0002119	Pa×s	545.94	Joback Method
dvisc	0.0003439	Pa×s	492.38	Joback Method
dvisc	0.0006283	Pa×s	438.81	Joback Method
dvisc	0.0013571	Pa×s	385.25	Joback Method

Sources

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=U383234&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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