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

Inchi: InChI=1S/C21H40O3/c1-3-5-7-8-9-10-11-12-13-14-15-16-17-18-20-24-21(22)23-19-6-4-2
InchiKey: OTRORGODLHWRCP-UHFFFAOYSA-N
Formula: C21H40O3
SMILES: C=CCCOC(=O)OCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 340.54

Physical Properties

Property code	Value	Unit	Source
gf	-125.14	kJ/mol	Joback Method
hf	-728.36	kJ/mol	Joback Method
hfus	52.84	kJ/mol	Joback Method
hvap	73.24	kJ/mol	Joback Method
log10ws	-7.39		Crippen Method
logp	7.197		Crippen Method
mcvol	315.760	ml/mol	McGowan Method
pc	999.54	kPa	Joback Method
rinpol	2317.00		NIST Webbook
rinpol	2317.00		NIST Webbook
tb	775.27	K	Joback Method
tc	952.22	K	Joback Method
tf	419.06	K	Joback Method
vc	1.234	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	976.22	J/mol×K	775.27	Joback Method
cpg	995.64	J/mol×K	804.76	Joback Method
cpg	1014.07	J/mol×K	834.25	Joback Method
cpg	1031.53	J/mol×K	863.74	Joback Method
cpg	1048.05	J/mol×K	893.23	Joback Method
cpg	1063.64	J/mol×K	922.72	Joback Method
cpg	1078.32	J/mol×K	952.22	Joback Method
dvisc	0.0010054	Pa×s	419.06	Joback Method

dvisc	0.0004502	Pa×s	478.43	Joback Method
dvisc	0.0002407	Pa×s	537.80	Joback Method
dvisc	0.0001458	Pa×s	597.16	Joback Method
dvisc	0.0000967	Pa×s	656.53	Joback Method
dvisc	0.0000686	Pa×s	715.90	Joback Method
dvisc	0.0000513	Pa×s	775.27	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=U383237&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