(E)-Dodec-2-enyl ethyl carbonate

Inchi: InChI=1S/C15H28O3/c1-3-5-6-7-8-9-10-11-12-13-14-18-15(16)17-4-2/h12-13H,3-11,14H
InchiKey: UQCHJEJJCAEXRW-OUKQBFOZSA-N
Formula: C15H28O3
SMILES: CCCCCCCCCC=CCOC(=O)OCC
Mol. weight [g/mol]: 256.38

Physical Properties

Property code	Value	Unit	Source
gf	-183.28	kJ/mol	Joback Method
hf	-612.73	kJ/mol	Joback Method
hfus	38.78	kJ/mol	Joback Method
hvap	60.51	kJ/mol	Joback Method
log10ws	-4.88		Crippen Method
logp	4.856		Crippen Method
mcvol	231.220	ml/mol	McGowan Method
pc	1505.81	kPa	Joback Method
rinpol	1775.00		NIST Webbook
tb	645.47	K	Joback Method
tc	818.48	K	Joback Method
tf	348.12	K	Joback Method
vc	0.897	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	630.10	J/mol×K	645.47	Joback Method
cpg	646.87	J/mol×K	674.31	Joback Method
cpg	662.90	J/mol×K	703.14	Joback Method
cpg	678.22	J/mol×K	731.98	Joback Method
cpg	692.83	J/mol×K	760.81	Joback Method
cpg	706.74	J/mol×K	789.65	Joback Method
cpg	719.98	J/mol×K	818.48	Joback Method
dvisc	0.0016616	Pa×s	348.12	Joback Method
dvisc	0.0007588	Pa×s	397.68	Joback Method

dvisc	0.0004123	Pa×s	447.24	Joback Method
dvisc	0.0002530	Pa×s	496.80	Joback Method
dvisc	0.0001696	Pa×s	546.35	Joback Method
dvisc	0.0001215	Pa×s	595.91	Joback Method
dvisc	0.0000917	Pa×s	645.47	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U373769&Units=SI
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

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