Diethyl hexahydrofuro[3,2-b]furan-3,6-diyl dicarbonate

Inchi: InChI=1S/C12H18O8/c1-3-15-11(13)19-7-5-17-10-8(6-18-9(7)10)20-12(14)16-4-2/h7-10H

InchiKey: XCUWNMJCFCMGNX-UHFFFAOYSA-N

Formula: C12H18O8

SMILES: CCOC(=O)OC1COC2C(OC(=O)OCC)COC12

Mol. weight [g/mol]: 290.27

Physical Properties

Property code	Value	Unit	Source
gf	-718.04	kJ/mol	Joback Method
hf	-1216.45	kJ/mol	Joback Method
hfus	44.96	kJ/mol	Joback Method
hvap	74.01	kJ/mol	Joback Method
log10ws	-1.11		Crippen Method
logp	0.867		Crippen Method
mcvol	196.580	ml/mol	McGowan Method
pc	2298.11	kPa	Joback Method
rinpol	1937.00		NIST Webbook
tb	737.96	K	Joback Method
tc	942.94	K	Joback Method
tf	487.28	K	Joback Method
vc	0.730	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	615.18	J/mol×K	737.96	Joback Method
cpg	630.57	J/mol×K	772.12	Joback Method
cpg	644.91	J/mol×K	806.29	Joback Method
cpg	658.19	J/mol×K	840.45	Joback Method
cpg	670.40	J/mol×K	874.61	Joback Method
cpg	681.52	J/mol×K	908.77	Joback Method
cpg	691.55	J/mol×K	942.94	Joback Method
dvisc	0.0015531	Pa×s	487.28	Joback Method
dvisc	0.0011649	Pa×s	529.06	Joback Method

dvisc	0.0009114	Pa×s	570.84	Joback Method
dvisc	0.0007372	Pa×s	612.62	Joback Method
dvisc	0.0006128	Pa×s	654.40	Joback Method
dvisc	0.0005207	Pa×s	696.18	Joback Method
dvisc	0.0004508	Pa×s	737.96	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=U373805&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