Diglycolic acid, 2,5-dimethylphenyl ethyl ester

Inchi: InChI=1S/C14H18O5/c1-4-18-13(15)8-17-9-14(16)19-12-7-10(2)5-6-11(12)3/h5-7H,4,8-9
InchiKey: QWSITZGPORANLE-UHFFFAOYSA-N
Formula: C14H18O5
SMILES: CCOC(=O)COCC(=O)Oc1cc(C)ccc1C
Mol. weight [g/mol]: 266.29

Physical Properties

Property code	Value	Unit	Source
gf	-412.69	kJ/mol	Joback Method
hf	-740.52	kJ/mol	Joback Method
hfus	32.04	kJ/mol	Joback Method
hvap	71.08	kJ/mol	Joback Method
log10ws	-2.36		Crippen Method
logp	1.789		Crippen Method
mcvol	205.110	ml/mol	McGowan Method
pc	2092.66	kPa	Joback Method
rinpol	2344.00		NIST Webbook
rinpol	2344.00		NIST Webbook
tb	731.36	K	Joback Method
tc	936.61	K	Joback Method
tf	465.55	K	Joback Method
vc	0.777	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	565.66	J/mol×K	731.36	Joback Method
cpg	579.62	J/mol×K	765.57	Joback Method
cpg	592.68	J/mol×K	799.78	Joback Method
cpg	604.83	J/mol×K	833.99	Joback Method
cpg	616.07	J/mol×K	868.19	Joback Method
cpg	626.37	J/mol×K	902.40	Joback Method
cpg	635.73	J/mol×K	936.61	Joback Method
dvisc	0.0006082	Pa×s	465.55	Joback Method

dvisc	0.0003873	Pa×s	509.85	Joback Method
dvisc	0.0002651	Pa×s	554.15	Joback Method
dvisc	0.0001919	Pa×s	598.46	Joback Method
dvisc	0.0001452	Pa×s	642.76	Joback Method
dvisc	0.0001140	Pa×s	687.06	Joback Method
dvisc	0.0000921	Pa×s	731.36	Joback Method

Sources

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=U382703&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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