2-Methoxyethyl 2-phenoxypropionate

Inchi: InChI=1S/C12H16O4/c1-10(12(13)15-9-8-14-2)16-11-6-4-3-5-7-11/h3-7,10H,8-9H2,1-2H
InchiKey: BOTPINPRRBDDNR-UHFFFAOYSA-N
Formula: C12H16O4
SMILES: COCCOC(=O)C(C)Oc1ccccc1
Mol. weight [g/mol]: 224.25

Physical Properties

Property code	Value	Unit	Source
gf	-283.79	kJ/mol	Joback Method
hf	-569.00	kJ/mol	Joback Method
hfus	22.52	kJ/mol	Joback Method
hvap	58.17	kJ/mol	Joback Method
log10ws	-1.75		Crippen Method
logp	1.643		Crippen Method
mcvol	175.360	ml/mol	McGowan Method
pc	2453.17	kPa	Joback Method
rinpol	1512.00		NIST Webbook
tb	621.33	K	Joback Method
tc	827.26	K	Joback Method
tf	353.04	K	Joback Method
vc	0.653	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	446.02	J/mol×K	621.33	Joback Method
cpg	460.94	J/mol×K	655.65	Joback Method
cpg	475.05	J/mol×K	689.97	Joback Method
cpg	488.33	J/mol×K	724.30	Joback Method
cpg	500.80	J/mol×K	758.62	Joback Method
cpg	512.44	J/mol×K	792.94	Joback Method
cpg	523.26	J/mol×K	827.26	Joback Method
dvisc	0.0014623	Pa×s	353.04	Joback Method
dvisc	0.0007435	Pa×s	397.75	Joback Method

dvisc	0.0004334	Pa×s	442.47	Joback Method
dvisc	0.0002790	Pa×s	487.19	Joback Method
dvisc	0.0001934	Pa×s	531.90	Joback Method
dvisc	0.0001419	Pa×s	576.62	Joback Method
dvisc	0.0001088	Pa×s	621.33	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=R540599&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