2-Methoxyethyl 2-phenoxybenzoate

Inchi: InChI=1S/C16H16O4/c1-18-11-12-19-16(17)14-9-5-6-10-15(14)20-13-7-3-2-4-8-13/h2-10
InchiKey: GNGJCYXRWNYLBL-UHFFFAOYSA-N
Formula: C16H16O4
SMILES: COCCOC(=O)c1ccccc1Oc1ccccc1
Mol. weight [g/mol]: 272.30

Physical Properties

Property code	Value	Unit	Source
gf	-144.89	kJ/mol	Joback Method
hf	-421.22	kJ/mol	Joback Method
hfus	30.05	kJ/mol	Joback Method
hvap	70.40	kJ/mol	Joback Method
log10ws	-3.27		Crippen Method
logp	3.282		Crippen Method
mcvol	207.960	ml/mol	McGowan Method
pc	2278.41	kPa	Joback Method
rinpol	1964.00		NIST Webbook
tb	744.95	K	Joback Method
tc	972.58	K	Joback Method
tf	452.06	K	Joback Method
vc	0.775	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	570.98	J/mol×K	744.95	Joback Method
cpg	634.18	J/mol×K	934.64	Joback Method
cpg	623.89	J/mol×K	896.70	Joback Method
cpg	612.44	J/mol×K	858.76	Joback Method
cpg	599.81	J/mol×K	820.83	Joback Method
cpg	585.99	J/mol×K	782.89	Joback Method
cpg	643.32	J/mol×K	972.58	Joback Method
dvisc	0.0000734	Pa×s	744.95	Joback Method
dvisc	0.0000924	Pa×s	696.13	Joback Method

dvisc	0.0001204	Pa×s	647.32	Joback Method
dvisc	0.0001638	Pa×s	598.50	Joback Method
dvisc	0.0002354	Pa×s	549.69	Joback Method
dvisc	0.0003632	Pa×s	500.88	Joback Method
dvisc	0.0006153	Pa×s	452.06	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=R540579&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