Di-(2-phenylphenoxy) methane

Inchi: InChI=1S/C25H20O2/c1-3-11-20(12-4-1)22-15-7-9-17-24(22)26-19-27-25-18-10-8-16-23
InchiKey: CVTZOGSKBHYCKX-UHFFFAOYSA-N
Formula: C25H20O2
SMILES: c1ccc(-c2ccccc2OCOc2ccccc2-c2ccccc2)cc1
Mol. weight [g/mol]: 352.43
CAS: 116374-06-2

Physical Properties

Property code	Value	Unit	Source
gf	380.00	kJ/mol	Joback Method
hf	99.41	kJ/mol	Joback Method
hfus	38.27	kJ/mol	Joback Method
hvap	86.49	kJ/mol	Joback Method
log10ws	-8.64		Crippen Method
logp	6.436		Crippen Method
mcvol	279.810	ml/mol	McGowan Method
pc	1798.51	kPa	Joback Method
tb	932.92	K	Joback Method
tc	1198.89	K	Joback Method
tf	546.69	K	Joback Method
vc	1.040	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	844.20	J/mol×K	932.92	Joback Method
cpg	902.32	J/mol×K	1154.56	Joback Method
cpg	893.63	J/mol×K	1110.23	Joback Method
cpg	883.59	J/mol×K	1065.90	Joback Method
cpg	872.09	J/mol×K	1021.58	Joback Method
cpg	859.00	J/mol×K	977.25	Joback Method
cpg	909.78	J/mol×K	1198.89	Joback Method
dvisc	0.0000329	Pa×s	932.92	Joback Method
dvisc	0.0000416	Pa×s	868.55	Joback Method

dvisc	0.0000545	Pa×s	804.18	Joback Method
dvisc	0.0000750	Pa×s	739.81	Joback Method
dvisc	0.0001095	Pa×s	675.43	Joback Method
dvisc	0.0001732	Pa×s	611.06	Joback Method
dvisc	0.0003051	Pa×s	546.69	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C116374062&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume