Benzoic acid, 4-biphenyl ester

Inchi: InChI=1S/C19H14O2/c20-19(17-9-5-2-6-10-17)21-18-13-11-16(12-14-18)15-7-3-1-4-8-15
InchiKey: CINHWMYRCOGYIX-UHFFFAOYSA-N
Formula: C19H14O2
SMILES: O=C(Oc1ccc(-c2ccccc2)cc1)c1ccccc1
Mol. weight [g/mol]: 274.31

Physical Properties

Property code	Value	Unit	Source
gf	202.78	kJ/mol	Joback Method
hf	17.83	kJ/mol	Joback Method
hfus	29.49	kJ/mol	Joback Method
hvap	74.53	kJ/mol	Joback Method
log10ws	-6.16		Crippen Method
logp	4.573		Crippen Method
mcvol	214.730	ml/mol	McGowan Method
pc	2455.60	kPa	Joback Method
rinpol	2551.00		NIST Webbook
rinpol	2551.00		NIST Webbook
tb	795.43	K	Joback Method
tc	1058.56	K	Joback Method
tf	467.83	K	Joback Method
vc	0.799	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	590.03	J/mol×K	795.43	Joback Method
cpg	605.18	J/mol×K	839.29	Joback Method
cpg	618.81	J/mol×K	883.14	Joback Method
cpg	631.02	J/mol×K	927.00	Joback Method
cpg	641.90	J/mol×K	970.85	Joback Method
cpg	651.57	J/mol×K	1014.71	Joback Method
cpg	660.13	J/mol×K	1058.56	Joback Method
dvisc	0.0008055	Pa×s	467.83	Joback Method

dvisc	0.0004591	Pa×s	522.43	Joback Method
dvisc	0.0002910	Pa×s	577.03	Joback Method
dvisc	0.0001996	Pa×s	631.63	Joback Method
dvisc	0.0001454	Pa×s	686.23	Joback Method
dvisc	0.0001109	Pa×s	740.83	Joback Method
dvisc	0.0000879	Pa×s	795.43	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=U360688&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