1,1'-Biphenyl, 4-ethenyl-

Other names:	Biphenyl, 4-vinyl-
	p-Phenylstyrene
	4-Phenylstyrene
	p-Vinylbiphenyl
	4-Vinylbiphenyl
	4-Vinyldiphenyl
	4-Ethenyl-1,1'-biphenyl
Inchi:	InChI=1S/C14H12/c1-2-12-8-10-14(11-9-12)13-6-4-3-5-7-13/h2-11H,1H2
InchiKey:	HDBWAWNLGGMZRQ-UHFFFAOYSA-N
Formula:	C14H12
SMILES:	C=Cc1ccc(-c2ccccc2)cc1
Mol. weight [g/mol]:	180.25
CAS:	2350-89-2

Physical Properties

Property code	Value	Unit	Source
gf	370.03	kJ/mol	Joback Method
hf	254.73	kJ/mol	Joback Method
hfus	18.43	kJ/mol	Joback Method
hvap	51.30	kJ/mol	Joback Method
log10ws	-4.90		Crippen Method
logp	3.997		Crippen Method
mcvol	156.300	ml/mol	McGowan Method
pc	2850.52	kPa	Joback Method
rinpol	275.90		NIST Webbook
rinpol	275.70		NIST Webbook
rinpol	275.60		NIST Webbook
rinpol	270.50		NIST Webbook
rinpol	275.70		NIST Webbook
rinpol	270.50		NIST Webbook
rinpol	270.60		NIST Webbook
tb	574.74	K	Joback Method
tc	820.92	K	Joback Method
tf	391.00 ± 5.00	K	NIST Webbook
tf	392.00 ± 4.00	K	NIST Webbook
vc	0.585	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	351.88	J/mol×K	574.74	Joback Method
cpg	368.61	J/mol×K	615.77	Joback Method
cpg	384.04	J/mol×K	656.80	Joback Method
cpg	398.24	J/mol×K	697.83	Joback Method
cpg	411.30	J/mol×K	738.86	Joback Method
cpg	423.30	J/mol×K	779.89	Joback Method
cpg	434.32	J/mol×K	820.92	Joback Method
dvisc	0.0018447	Pa×s	311.14	Joback Method
dvisc	0.0009845	Pa×s	355.07	Joback Method
dvisc	0.0006033	Pa×s	399.01	Joback Method
dvisc	0.0004074	Pa×s	442.94	Joback Method
dvisc	0.0002954	Pa×s	486.87	Joback Method
dvisc	0.0002258	Pa×s	530.81	Joback Method
dvisc	0.0001799	Pa×s	574.74	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=C2350892&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