Benzene, 1,1'-ethenylidenebis-[4-methyl-

Other names: 1,1-di(p-Tolyl)ethylene
Inchi: InChI=1S/C16H16/c1-12-4-8-15(9-5-12)14(3)16-10-6-13(2)7-11-16/h4-11H,3H2,1-2H3
InchiKey: HEDMCKGHZIRQLS-UHFFFAOYSA-N
Formula: C16H16
SMILES: C=C(c1ccc(C)cc1)c1ccc(C)cc1
Mol. weight [g/mol]: 208.30
CAS: 2919-20-2

Physical Properties

Property code	Value	Unit	Source
affp	900.20	kJ/mol	NIST Webbook
basg	871.40	kJ/mol	NIST Webbook
chs	-8522.00 ± 2.00	kJ/mol	NIST Webbook
chs	-8668.70 ± 2.00	kJ/mol	NIST Webbook
gf	368.69	kJ/mol	Joback Method
hf	192.19	kJ/mol	Joback Method
hfus	21.91	kJ/mol	Joback Method
hsub	101.00 ± 1.40	kJ/mol	NIST Webbook
hvap	56.50	kJ/mol	Joback Method
log10ws	-4.96		Crippen Method
logp	4.365		Crippen Method
mcvol	184.480	ml/mol	McGowan Method
pc	2322.54	kPa	Joback Method
tb	625.36	K	Joback Method
tc	866.59	K	Joback Method
tf	332.24	K	Joback Method
vc	0.698	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	513.50	J/mol×K	786.18	Joback Method
cpg	526.61	J/mol×K	826.38	Joback Method
cpg	449.64	J/mol×K	625.36	Joback Method

cpg	467.47	J/mol×K	665.56	Joback Method
cpg	484.01	J/mol×K	705.77	Joback Method
cpg	499.32	J/mol×K	745.97	Joback Method
cpg	538.73	J/mol×K	866.59	Joback Method
hfust	23.31	kJ/mol	334.10	NIST Webbook
hsubt	100.30 ± 1.40	kJ/mol	320.50	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	408.00 ± 1.00	K	0.08	NIST Webbook

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=C2919202&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

affp: Proton affinity
basg: Gas basicity
chs: Standard solid enthalpy of combustion
cpg: Ideal gas heat capacity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hfust: Enthalpy of fusion at a given temperature
hsub: Enthalpy of sublimation at standard conditions
hsubt: Enthalpy of sublimation at a given temperature
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume