Benzene, 1,1'-(1,3-butadienylidene)bis-

Other names: 1,1-diphenyl-1,3-butadiene
Inchi: InChI=1S/C16H14/c1-2-9-16(14-10-5-3-6-11-14)15-12-7-4-8-13-15/h2-13H,1H2
InchiKey: GUPMCMZMDAGSPF-UHFFFAOYSA-N
Formula: C16H14
SMILES: C=CC=C(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 206.28
CAS: 4165-81-5

Physical Properties

Property code	Value	Unit	Source
gf	468.17	kJ/mol	Joback Method
hf	332.35	kJ/mol	Joback Method
hfus	22.89	kJ/mol	Joback Method
hvap	55.13	kJ/mol	Joback Method
log10ws	-4.70		Crippen Method
logp	4.304		Crippen Method
mcvol	180.180	ml/mol	McGowan Method
pc	2517.59	kPa	Joback Method
tb	619.56	K	Joback Method
tc	869.66	K	Joback Method
tf	302.12	K	Joback Method
vc	0.677	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	429.75	J/mol×K	619.56	Joback Method
cpg	447.56	J/mol×K	661.24	Joback Method
cpg	463.88	J/mol×K	702.93	Joback Method
cpg	478.84	J/mol×K	744.61	Joback Method
cpg	492.57	J/mol×K	786.30	Joback Method
cpg	505.19	J/mol×K	827.98	Joback Method
cpg	516.83	J/mol×K	869.66	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=C4165815&Units=SI

Legend

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
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