Benzene, 1,1'-(1,2-dimethyl-1,2-ethenediyl)bis-, (Z)-

Other names: (Z)-2,3-diphenyl-2-butene
Inchi: InChI=1S/C16H16/c1-13(15-9-5-3-6-10-15)14(2)16-11-7-4-8-12-16/h3-12H,1-2H3/b14-13
InchiKey: ATYQGOFMEQUNMJ-YPKPFQOOSA-N
Formula: C16H16
SMILES: CC(=C(C)c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 208.30
CAS: 782-05-8

Physical Properties

Property code	Value	Unit	Source
gf	371.78	kJ/mol	Joback Method
hf	197.13	kJ/mol	Joback Method
hfus	22.86	kJ/mol	Joback Method
hvap	55.88	kJ/mol	Joback Method
log10ws	-4.91		Crippen Method
logp	4.637		Crippen Method
mcvol	184.480	ml/mol	McGowan Method
pc	2426.65	kPa	Joback Method
tb	622.76	K	Joback Method
tc	871.95	K	Joback Method
tf	289.92	K	Joback Method
vc	0.698	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	451.11	J/mol×K	622.76	Joback Method
cpg	469.87	J/mol×K	664.29	Joback Method
cpg	487.12	J/mol×K	705.82	Joback Method
cpg	502.98	J/mol×K	747.36	Joback Method
cpg	517.57	J/mol×K	788.89	Joback Method
cpg	531.03	J/mol×K	830.42	Joback Method
cpg	543.45	J/mol×K	871.95	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=C782058&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