Benzene, 1,1'-(2-methyl-1-propenylidene)bis-

Other names:	Propene, 2-methyl-1,1-diphenyl-
	1,1-Dimethyl-2,2-diphenylethene
	1,1-Dimethyl-2,2-diphenylethylene
	1,1-Diphenyl-2-methylpropene
	1,1-Diphenylisobutylene
	2-Methyl-1,1-diphenylpropene
Inchi:	InChI=1S/C16H16/c1-13(2)16(14-9-5-3-6-10-14)15-11-7-4-8-12-15/h3-12H,1-2H3
InchiKey:	JHLNLKYQTWQERE-UHFFFAOYSA-N
Formula:	C16H16
SMILES:	CC(C)=C(c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	208.30
CAS:	781-33-9

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	-4.85		Crippen Method
logp	4.528		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=C781339&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