Benzene, 1,1'-(1,4-dimethyl-1,4-butanediyl)bis-

Other names:	Hexane, 2,5-diphenyl-
	2,5-Diphenylhexane
	1,1'-(1,4-dimethyl-1,4-butanediyl)bisbenzene
Inchi:	InChI=1S/C18H22/c1-15(17-9-5-3-6-10-17)13-14-16(2)18-11-7-4-8-12-18/h3-12,15-16H,1
InchiKey:	SFGSCWQCLSTTPQ-UHFFFAOYSA-N
Formula:	C18H22
SMILES:	CC(CCC(C)c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	238.37
CAS:	3548-85-4

Physical Properties

Property code	Value	Unit	Source
gf	320.62	kJ/mol	Joback Method
hf	47.65	kJ/mol	Joback Method
hfus	23.41	kJ/mol	Joback Method
hvap	59.44	kJ/mol	Joback Method
log10ws	-5.49		Crippen Method
logp	5.374		Crippen Method
mcvol	216.960	ml/mol	McGowan Method
pc	1944.08	kPa	Joback Method
tb	663.72	K	Joback Method
tc	894.23	K	Joback Method
tf	315.46	K	Joback Method
vc	0.816	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	578.75	J/mol×K	663.72	Joback Method
cpg	598.84	J/mol×K	702.14	Joback Method
cpg	617.48	J/mol×K	740.56	Joback Method
cpg	634.76	J/mol×K	778.98	Joback Method
cpg	650.76	J/mol×K	817.40	Joback Method
cpg	665.57	J/mol×K	855.81	Joback Method

cpg	679.28	J/mol×K	894.23	Joback Method
dvisc	0.0037813	Pa×s	315.46	Joback Method
dvisc	0.0013126	Pa×s	373.50	Joback Method
dvisc	0.0006057	Pa×s	431.55	Joback Method
dvisc	0.0003357	Pa×s	489.59	Joback Method
dvisc	0.0002109	Pa×s	547.63	Joback Method
dvisc	0.0001448	Pa×s	605.68	Joback Method
dvisc	0.0001062	Pa×s	663.72	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3548854&Units=SI
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

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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume