Benzene, 1,1'-(1,6-hexanediyl)bis-

Other names: Hexane, 1,6-diphenyl-
1,6-Diphenylhexane
Inchi: InChI=1S/C18H22/c1(5-11-17-13-7-3-8-14-17)2-6-12-18-15-9-4-10-16-18/h3-4,7-10,13-1
InchiKey: DVGPMIRVCZNXMD-UHFFFAOYSA-N
Formula: C18H22
SMILES: c1ccc(CCCCCCc2ccccc2)cc1
Mol. weight [g/mol]: 238.37
CAS: 1087-49-6

Physical Properties

Property code	Value	Unit	Source
affp	826.10	kJ/mol	NIST Webbook
basg	783.80	kJ/mol	NIST Webbook
chl	-10230.00	kJ/mol	NIST Webbook
gf	325.50	kJ/mol	Joback Method
hf	58.21	kJ/mol	Joback Method
hfus	30.46	kJ/mol	Joback Method
hvap	60.21	kJ/mol	Joback Method
log10ws	-5.56		Crippen Method
logp	5.032		Crippen Method
mcvol	216.960	ml/mol	McGowan Method
pc	1916.94	kPa	Joback Method
tb	618.82 ± 0.20	K	NIST Webbook
tc	886.15	K	Joback Method
tf	280.10 ± 2.00	K	NIST Webbook
tf	261.16 ± 0.05	K	NIST Webbook
vc	0.828	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	675.08	J/mol×K	886.15	Joback Method
cpg	661.65	J/mol×K	849.23	Joback Method
cpg	647.22	J/mol×K	812.30	Joback Method

cpg	631.70	J/mol×K	775.38	Joback Method
cpg	615.01	J/mol×K	738.45	Joback Method
cpg	597.08	J/mol×K	701.53	Joback Method
cpg	577.84	J/mol×K	664.60	Joback Method
dvisc	0.0021987	Pa×s	345.46	Joback Method
dvisc	0.0001234	Pa×s	664.60	Joback Method
dvisc	0.0001618	Pa×s	611.41	Joback Method
dvisc	0.0002235	Pa×s	558.22	Joback Method
dvisc	0.0003304	Pa×s	505.03	Joback Method
dvisc	0.0005356	Pa×s	451.84	Joback Method
dvisc	0.0009876	Pa×s	398.65	Joback Method
hvapt	88.00	kJ/mol	333.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1087496&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

affp: Proton affinity
basg: Gas basicity
chl: Standard liquid enthalpy of combustion
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
hvapt: Enthalpy of vaporization at a given temperature
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