Piperidine, 4-(diphenylmethyl)-

Other names: 4-(diphenylmethyl)piperidine
Inchi: InChI=1S/C18H21N/c1-3-7-15(8-4-1)18(16-9-5-2-6-10-16)17-11-13-19-14-12-17/h1-10,1
InchiKey: LUYLEMZRJQTGPM-UHFFFAOYSA-N
Formula: C18H21N
SMILES: c1ccc(C(c2ccccc2)C2CCNCC2)cc1
Mol. weight [g/mol]: 251.37
CAS: 19841-73-7

Physical Properties

Property code	Value	Unit	Source
gf	435.22	kJ/mol	Joback Method
hf	145.06	kJ/mol	Joback Method
hfus	28.36	kJ/mol	Joback Method
hvap	67.01	kJ/mol	Joback Method
log10ws	-4.47		Crippen Method
logp	3.818		Crippen Method
mcvol	216.080	ml/mol	McGowan Method
pc	2388.85	kPa	Joback Method
tb	732.26	K	Joback Method
tc	999.63	K	Joback Method
tf	442.87	K	Joback Method
vc	0.791	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	623.65	J/mol×K	732.26	Joback Method
cpg	645.59	J/mol×K	776.82	Joback Method
cpg	665.52	J/mol×K	821.38	Joback Method
cpg	683.57	J/mol×K	865.94	Joback Method
cpg	699.86	J/mol×K	910.51	Joback Method
cpg	714.51	J/mol×K	955.07	Joback Method
cpg	727.65	J/mol×K	999.63	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=C19841737&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