benzyldiphenylamine

Other names: Benzenemethanamine, N,N-diphenyl-
Inchi: InChI=1S/C19H17N/c1-4-10-17(11-5-1)16-20(18-12-6-2-7-13-18)19-14-8-3-9-15-19/h1-1
InchiKey: FKJARBPQBIATJT-UHFFFAOYSA-N
Formula: C19H17N
SMILES: c1ccc(CN(c2ccccc2)c2ccccc2)cc1
Mol. weight [g/mol]: 259.35
CAS: 606-87-1

Physical Properties

Property code	Value	Unit	Source
chs	-10091.00 ± 10.00	kJ/mol	NIST Webbook
gf	557.11	kJ/mol	Joback Method
hf	341.63	kJ/mol	Joback Method
hfs	185.00 ± 10.00	kJ/mol	NIST Webbook
hfus	30.11	kJ/mol	Joback Method
hvap	66.76	kJ/mol	Joback Method
log10ws	-5.29		Crippen Method
logp	5.025		Crippen Method
mcvol	217.270	ml/mol	McGowan Method
pc	2377.22	kPa	Joback Method
tb	726.60	K	Joback Method
tc	984.61	K	Joback Method
tf	415.62	K	Joback Method
vc	0.793	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	589.67	J/mol×K	726.60	Joback Method
cpg	608.11	J/mol×K	769.60	Joback Method
cpg	624.86	J/mol×K	812.60	Joback Method
cpg	640.08	J/mol×K	855.60	Joback Method
cpg	653.92	J/mol×K	898.61	Joback Method
cpg	666.54	J/mol×K	941.61	Joback Method

cpg	678.10	J/mol×K	984.61	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=C606871&Units=SI

Legend

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase 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