Benzenemethanamine, N-phenyl-N-(phenylmethyl)-

Other names: Aniline, N,N-dibenzyl-
Benzenamine, N,N-bis(phenylmethyl)-
Dibenzylamine, N-phenyl-
Dibenzylaniline
Dibenzylaniline, N,N-bis(phenylmethyl)-
N-Phenyldibenzylamine
N,N-Dibenzylaniline
Aniline, N,N-bis(benzyl)-
NSC 6243
Aniline, dibenzyl-

Inchi: InChI=1S/C20H19N/c1-4-10-18(11-5-1)16-21(20-14-8-3-9-15-20)17-19-12-6-2-7-13-19/h

InchiKey: ISGXOWLMGOPVPB-UHFFFAOYSA-N

Formula: C20H19N

SMILES: c1ccc(CN(Cc2ccccc2)c2ccccc2)cc1

Mol. weight [g/mol]: 273.37

CAS: 91-73-6

Physical Properties

Property code	Value	Unit	Source
gf	565.53	kJ/mol	Joback Method
hf	320.99	kJ/mol	Joback Method
hfus	32.70	kJ/mol	Joback Method
hvap	68.98	kJ/mol	Joback Method
log10ws	-5.60		Crippen Method
logp	4.893		Crippen Method
mcvol	231.360	ml/mol	McGowan Method
pc	2169.38	kPa	Joback Method
tb	749.48	K	Joback Method
tc	1001.69	K	Joback Method
tf	426.89	K	Joback Method
vc	0.850	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	644.45	J/mol×K	749.48	Joback Method
cpg	662.95	J/mol×K	791.52	Joback Method
cpg	679.83	J/mol×K	833.55	Joback Method
cpg	695.22	J/mol×K	875.59	Joback Method
cpg	709.29	J/mol×K	917.62	Joback Method
cpg	722.19	J/mol×K	959.66	Joback Method
cpg	734.06	J/mol×K	1001.69	Joback Method

Sources

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=C91736&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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