Methanediamine,n,n'-dibenzyl-n,n'-dimethyl-

Inchi: InChI=1S/C17H22N2/c1-18(13-16-9-5-3-6-10-16)15-19(2)14-17-11-7-4-8-12-17/h3-12H,1
InchiKey: MBELUIWNSOZTSD-UHFFFAOYSA-N
Formula: C17H22N2
SMILES: CN(Cc1ccccc1)CN(C)Cc1ccccc1
Mol. weight [g/mol]: 254.37
CAS: 1483-42-7

Physical Properties

Property code	Value	Unit	Source
gf	538.64	kJ/mol	Joback Method
hf	213.91	kJ/mol	Joback Method
hfus	33.91	kJ/mol	Joback Method
hvap	62.07	kJ/mol	Joback Method
log10ws	-3.77		Crippen Method
logp	3.208		Crippen Method
mcvol	222.830	ml/mol	McGowan Method
pc	2081.22	kPa	Joback Method
tb	666.60	K	Joback Method
tc	885.62	K	Joback Method
tf	399.13	K	Joback Method
vc	0.807	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	603.06	J/mol×K	666.60	Joback Method
cpg	622.29	J/mol×K	703.10	Joback Method
cpg	640.14	J/mol×K	739.61	Joback Method
cpg	656.69	J/mol×K	776.11	Joback Method
cpg	672.04	J/mol×K	812.61	Joback Method
cpg	686.28	J/mol×K	849.11	Joback Method
cpg	699.50	J/mol×K	885.62	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1483427&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
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

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