1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis(phenylmethyl)-

Other names: Ethylenediamine, N,N'-dibenzyl-N,N'-dimethyl-
N,N'-Dibenzyl-N,N'-dimethylethylenediamine

Inchi: InChI=1S/C18H24N2/c1-19(15-17-9-5-3-6-10-17)13-14-20(2)16-18-11-7-4-8-12-18/h3-12

InchiKey: VRPZLDIUBCEYBA-UHFFFAOYSA-N

Formula: C18H24N2

SMILES: CN(CCN(C)Cc1ccccc1)Cc1ccccc1

Mol. weight [g/mol]: 268.40

CAS: 102-18-1

Physical Properties

Property code	Value	Unit	Source
gf	547.06	kJ/mol	Joback Method
hf	193.27	kJ/mol	Joback Method
hfus	36.50	kJ/mol	Joback Method
hvap	64.30	kJ/mol	Joback Method
log10ws	-3.69		Crippen Method
logp	3.250		Crippen Method
mcvol	236.920	ml/mol	McGowan Method
pc	1910.24	kPa	Joback Method
tb	689.48	K	Joback Method
tc	904.94	K	Joback Method
tf	410.40	K	Joback Method
vc	0.864	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	657.91	J/mol×K	689.48	Joback Method
cpg	677.27	J/mol×K	725.39	Joback Method
cpg	695.26	J/mol×K	761.30	Joback Method
cpg	711.98	J/mol×K	797.21	Joback Method
cpg	727.53	J/mol×K	833.12	Joback Method
cpg	741.99	J/mol×K	869.03	Joback Method
cpg	755.45	J/mol×K	904.94	Joback Method

Sources

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=C102181&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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