N,N'-Diphenylmethylenediamine

Inchi: InChI=1S/C13H14N2/c1-3-7-12(8-4-1)14-11-15-13-9-5-2-6-10-13/h1-10,14-15H,11H2
InchiKey: OHQOKJPHNPUMLN-UHFFFAOYSA-N
Formula: C13H14N2
SMILES: c1ccc(NCNc2ccccc2)cc1
Mol. weight [g/mol]: 198.26
CAS: 622-14-0

Physical Properties

Property code	Value	Unit	Source
gf	462.18	kJ/mol	Joback Method
hf	268.35	kJ/mol	Joback Method
hfus	27.71	kJ/mol	Joback Method
hvap	61.96	kJ/mol	Joback Method
log10ws	-3.22		Crippen Method
logp	3.168		Crippen Method
mcvol	166.470	ml/mol	McGowan Method
pc	3163.27	kPa	Joback Method
tb	650.54	K	Joback Method
tc	890.70	K	Joback Method
tf	394.43	K	Joback Method
vc	0.618	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	425.79	J/mol×K	650.54	Joback Method
cpg	441.54	J/mol×K	690.57	Joback Method
cpg	456.03	J/mol×K	730.59	Joback Method
cpg	469.32	J/mol×K	770.62	Joback Method
cpg	481.52	J/mol×K	810.65	Joback Method
cpg	492.69	J/mol×K	850.67	Joback Method
cpg	502.92	J/mol×K	890.70	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C622140&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