P-phenylenediamine, n,n'-dimethyl-n,n'-diphenyl-

Inchi: InChI=1S/C20H20N2/c1-21(17-9-5-3-6-10-17)19-13-15-20(16-14-19)22(2)18-11-7-4-8-12
InchiKey: HAXDASGWZHFNLP-UHFFFAOYSA-N
Formula: C20H20N2
SMILES: CN(c1ccccc1)c1ccc(N(C)c2ccccc2)cc1
Mol. weight [g/mol]: 288.39
CAS: 17754-68-6

Physical Properties

Property code	Value	Unit	Source
gf	666.68	kJ/mol	Joback Method
hf	377.05	kJ/mol	Joback Method
hfus	35.33	kJ/mol	Joback Method
hvap	71.69	kJ/mol	Joback Method
log10ws	-4.88		Crippen Method
logp	5.222		Crippen Method
mcvol	241.340	ml/mol	McGowan Method
pc	2135.43	kPa	Joback Method
tb	766.90	K	Joback Method
tc	1015.69	K	Joback Method
tf	471.88	K	Joback Method
vc	0.868	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	684.19	J/mol×K	766.90	Joback Method
cpg	702.43	J/mol×K	808.36	Joback Method
cpg	719.10	J/mol×K	849.83	Joback Method
cpg	734.33	J/mol×K	891.29	Joback Method
cpg	748.29	J/mol×K	932.76	Joback Method
cpg	761.12	J/mol×K	974.22	Joback Method
cpg	772.97	J/mol×K	1015.69	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=C17754686&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