P-phenylenediamine, n,n'-diethyl-n,n'-diphenyl-

Inchi: InChI=1S/C22H24N2/c1-3-23(19-11-7-5-8-12-19)21-15-17-22(18-16-21)24(4-2)20-13-9-6

InchiKey: CILBNZUWMUCCEK-UHFFFAOYSA-N

Formula: C22H24N2

SMILES: CCN(c1ccccc1)c1ccc(N(CC)c2ccccc2)cc1

Mol. weight [g/mol]: 316.44

CAS: 31910-10-8

Physical Properties

Property code	Value	Unit	Source
gf	683.52	kJ/mol	Joback Method
hf	335.77	kJ/mol	Joback Method
hfus	40.51	kJ/mol	Joback Method
hvap	76.14	kJ/mol	Joback Method
log10ws	-5.72		Crippen Method
logp	6.003		Crippen Method
mcvol	269.520	ml/mol	McGowan Method
pc	1801.56	kPa	Joback Method
tb	812.66	K	Joback Method
tc	1052.11	K	Joback Method
tf	494.42	K	Joback Method
vc	0.980	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	797.74	J/mol×K	812.66	Joback Method
cpg	815.98	J/mol×K	852.57	Joback Method
cpg	832.76	J/mol×K	892.48	Joback Method
cpg	848.21	J/mol×K	932.38	Joback Method
cpg	862.48	J/mol×K	972.29	Joback Method
cpg	875.72	J/mol×K	1012.20	Joback Method
cpg	888.06	J/mol×K	1052.11	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=C31910108&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

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