Benzenamine, N-phenyl-4-(phenylazo)-

Other names:	Diphenylamine, 4-(phenylazo)-
	N-Phenyl-4-aminoazobenzene
	4-(Phenylazo)diphenylamine
	4-Benzeneazodiphenylamine
	p-Phenazodiphenylamine
	Azobenzene, 4-anilino-
	4-Anilinoazobenzene
	N-Phenyl-4-[phenyldiazenyl]aniline
	4-(Phenylamino)azobenzene
	Benzenamine, N-phenyl-4-(2-phenyldiazenyl)-
	N-Phenyl-4-(phenylazo)aniline
	NSC 74774
Inchi:	InChI=1S/C18H15N3/c1-3-7-15(8-4-1)19-16-11-13-18(14-12-16)21-20-17-9-5-2-6-10-17/
InchiKey:	VXLFYNFOITWQPM-UHFFFAOYSA-N
Formula:	C18H15N3
SMILES:	c1ccc(N=Nc2ccc(Nc3ccccc3)cc2)cc1
Mol. weight [g/mol]:	273.33
CAS:	101-75-7

Physical Properties

Property code	Value	Unit	Source
hf	383.96	kJ/mol	Joback Method
hvap	76.26	kJ/mol	Joback Method
log10ws	-5.32		Crippen Method
logp	5.846		Crippen Method
mcvol	218.840	ml/mol	McGowan Method
pc	2034.55	kPa	Joback Method
tb	895.63	K	Joback Method
tc	1172.43	K	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=C101757&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

hf:	Enthalpy of formation 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