

Diazeno, bis(4-nitrophenyl)-

Other names:	Azobenzene, 4,4'-dinitro- p,p'-Dinitroazobenzene 4,4'-Dinitroazobenzene
Inchi:	InChI=1S/C12H8N4O4/c17-15(18)11-5-1-9(2-6-11)13-14-10-3-7-12(8-4-10)16(19)20/h1-
InchiKey:	BYLJUTWUGSHKJB-UHFFFAOYSA-N
Formula:	C12H8N4O4
SMILES:	O=[N+](O-)[c1ccc(N=Nc2ccc([N+](=O)[O-])cc2)cc1
Mol. weight [g/mol]:	272.22
CAS:	3646-57-9

Physical Properties

Property code	Value	Unit	Source
hf	184.81	kJ/mol	Joback Method
h _{vap}	88.03	kJ/mol	Joback Method
ie	9.97	eV	NIST Webbook
log ₁₀ ws	-4.81		Crippen Method
logp	3.918		Crippen Method
m _{cvol}	182.920	ml/mol	McGowan Method
pc	2561.10	kPa	Joback Method
tb	990.16	K	Joback Method
tc	1289.55	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=C3646579&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

hf:	Enthalpy of formation at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log₁₀ws:	Log10 of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

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