Hydrazine, (4-nitrophenyl)-

Other names:	Hydrazine, (p-nitrophenyl)-
	(p-Nitrophenyl)hydrazine
	(4-Nitrophenyl)hydrazine
	p-Hydrazinonitrobenzene
	p-Nitrophenylhydrazide
Inchi:	InChI=1S/C6H7N3O2/c7-8-5-1-3-6(4-2-5)9(10)11/h1-4,8H,7H2
InchiKey:	KMVPXBDOWDXXEN-UHFFFAOYSA-N
Formula:	C6H7N3O2
SMILES:	NNc1ccc([N+](=O)[O-])cc1
Mol. weight [g/mol]:	153.14
CAS:	100-16-3

Physical Properties

Property code	Value	Unit	Source
gf	293.81	kJ/mol	Joback Method
hf	134.39	kJ/mol	Joback Method
hfus	26.61	kJ/mol	Joback Method
hvap	65.56	kJ/mol	Joback Method
log10ws	-2.14		Crippen Method
logp	0.880		Crippen Method
mcvol	109.020	ml/mol	McGowan Method
pc	5131.32	kPa	Joback Method
tb	642.88	K	Joback Method
tc	902.81	K	Joback Method
tf	475.85	K	Joback Method
vc	0.409	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	267.62	J/mol×K	642.88	Joback Method
cpg	277.46	J/mol×K	686.20	Joback Method
cpg	286.45	J/mol×K	729.52	Joback Method
cpg	294.64	J/mol×K	772.84	Joback Method

cpg	302.07	J/mol×K	816.17	Joback Method
cpg	308.80	J/mol×K	859.49	Joback Method
cpg	314.88	J/mol×K	902.81	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=C100163&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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