

1-Methyl-1-(2,4-dinitrophenyl)hydrazine

Inchi:	InChI=1S/C7H8N4O4/c1-9(8)6-3-2-5(10(12)13)4-7(6)11(14)15/h2-4H,8H2,1H3
InchiKey:	YMBHFDADJOADTC-UHFFFAOYSA-N
Formula:	C7H8N4O4
SMILES:	CN(N)c1ccc([N+](=O)[O-])cc1[N+](=O)[O-]
Mol. weight [g/mol]:	212.16
CAS:	19255-35-7

Physical Properties

Property code	Value	Unit	Source
gf	349.54	kJ/mol	Joback Method
hf	105.58	kJ/mol	Joback Method
hfus	38.09	kJ/mol	Joback Method
hvap	80.64	kJ/mol	Joback Method
log10ws	-2.69		Crippen Method
logp	0.813		Crippen Method
mcvol	140.530	ml/mol	McGowan Method
pc	4385.77	kPa	Joback Method
tb	784.85	K	Joback Method
tc	1056.81	K	Joback Method
tf	623.06	K	Joback Method
vc	0.530	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	385.83	J/molxK	784.85	Joback Method
cpg	395.15	J/molxK	830.18	Joback Method
cpg	403.53	J/molxK	875.50	Joback Method
cpg	411.04	J/molxK	920.83	Joback Method
cpg	417.77	J/molxK	966.16	Joback Method
cpg	423.78	J/molxK	1011.48	Joback Method
cpg	429.16	J/molxK	1056.81	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C19255357&Units=SI

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
mccvol:	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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