2-Nitro-1-naphthol

Other names:	1-Naphthalenol, 2-nitro-
	1-Naphthol, 2-nitro-
	1-Hydroxy-2-nitronaphthalene
	2-Nitro-naphthalen-1-ol
Inchi:	InChI=1S/C10H7NO3/c12-10-8-4-2-1-3-7(8)5-6-9(10)11(13)14/h1-6,12H
InchiKey:	MUCCHGOWMZTLHK-UHFFFAOYSA-N
Formula:	C10H7NO3
SMILES:	O=[N+]([O-])c1ccc2ccccc2c1O
Mol. weight [g/mol]:	189.17
CAS:	607-24-9

Physical Properties

Property code	Value	Unit	Source
gf	123.68	kJ/mol	Joback Method
hf	-21.67	kJ/mol	Joback Method
hfus	29.47	kJ/mol	Joback Method
hvap	72.04	kJ/mol	Joback Method
log10ws	-3.47		Crippen Method
logp	2.454		Crippen Method
mcvol	131.830	ml/mol	McGowan Method
pc	4717.12	kPa	Joback Method
rinpol	287.20		NIST Webbook
tb	711.30	K	Joback Method
tc	985.60	K	Joback Method
tf	529.43	K	Joback Method
vc	0.458	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.94	J/mol×K	711.30	Joback Method
cpg	346.82	J/mol×K	757.02	Joback Method
cpg	355.95	J/mol×K	802.73	Joback Method
cpg	364.53	J/mol×K	848.45	Joback Method

cpg	372.76	J/mol×K	894.16	Joback Method
cpg	380.83	J/mol×K	939.88	Joback Method
cpg	388.94	J/mol×K	985.60	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C607249&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume