

Nitrogen oxide anion

Inchi:	InChI=1S/HNO2/c2-1-3/h(H,2,3)/p-1
InchiKey:	IOVCWXUNBOPUCH-UHFFFAOYSA-M
Formula:	NO2-
SMILES:	O=N[O-]
Mol. weight [g/mol]:	46.01
CAS:	14797-65-0

Physical Properties

Property code	Value	Unit	Source
gf	37.05	kJ/mol	Joback Method
hf	1.72	kJ/mol	Joback Method
hfus	8.80	kJ/mol	Joback Method
hvap	32.04	kJ/mol	Joback Method
log10ws	-1.07		Crippen Method
logp	0.251		Crippen Method
mcvol	26.130	ml/mol	McGowan Method
pc	7406.07	kPa	Joback Method
tb	350.54	K	Joback Method
tc	561.53	K	Joback Method
tf	249.74	K	Joback Method
vc	0.108	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	33.13	J/mol×K	350.54	Joback Method
cpg	35.27	J/mol×K	385.70	Joback Method
cpg	37.11	J/mol×K	420.87	Joback Method
cpg	38.66	J/mol×K	456.03	Joback Method
cpg	39.96	J/mol×K	491.20	Joback Method
cpg	41.04	J/mol×K	526.36	Joback Method
cpg	41.93	J/mol×K	561.53	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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=C14797650&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
mcvol:	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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