

Nitrous acid

Other names:	HNO2 HONO Kyselina dusite Nitrosyl hydroxide Nitrous acid, trans
Inchi:	InChI=1S/HNO2/c2-1-3/h(H,2,3)
InchiKey:	IOVCWXUNBOPUCH-UHFFFAOYSA-N
Formula:	HNO2
SMILES:	O=NO
Mol. weight [g/mol]:	47.01
CAS:	7782-77-6

Physical Properties

Property code	Value	Unit	Source
hf	-363.75	kJ/mol	Joback Method
hvap	41.37	kJ/mol	Joback Method
ie	11.30	eV	NIST Webbook
log10ws	0.33		Crippen Method
logp	0.142		Crippen Method
mcvol	28.280	ml/mol	McGowan Method
pc	7640.96	kPa	Joback Method
tb	354.98	K	Joback Method
tc	521.31	K	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
KDB:	https://www.thermo.com/files/research/kdb/mol/mol1910.mol
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7782776&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemo.com/doc/models/crippen_log10ws

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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<https://www.chemeo.com/cid/71-307-2/Nitrous-acid.pdf>

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