

Ethyl-nitrite-

Other names:	Nitrous acid, ethyl ester
Inchi:	InChI=1S/C2H5NO2/c1-2-5-3-4/h2H2,1H3
InchiKey:	QQZWEECEMNQSTG-UHFFFAOYSA-N
Formula:	C2H5NO2
SMILES:	CCON=O
Mol. weight [g/mol]:	75.07
CAS:	109-95-5

Physical Properties

Property code	Value	Unit	Source
affp	818.90	kJ/mol	NIST Webbook
basg	786.40	kJ/mol	NIST Webbook
hf	-108.00	kJ/mol	NIST Webbook
hvap	31.55	kJ/mol	Joback Method
ie	10.53 ± 0.01	eV	NIST Webbook
log10ws	-0.93		Crippen Method
logp	0.704		Crippen Method
mcvol	56.460	ml/mol	McGowan Method
pc	4789.21	kPa	Joback Method
rinpol	377.00		NIST Webbook
rinpol	377.00		NIST Webbook
tb	290.15 ± 1.50	K	NIST Webbook
tc	499.64	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	25.70	kJ/mol	264.00	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C109955&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

affp:	Proton affinity
basg:	Gas basicity
hf:	Enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
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

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