

# Hydrogen anion

Inchi:	InChI=1S/H/q-1
InchiKey:	KLGZELKXQMTEMM-UHFFFAOYSA-N
Formula:	H-
SMILES:	[H][H-][H]
Mol. weight [g/mol]:	1.01
CAS:	12184-88-2

## Physical Properties

Property code	Value	Unit	Source
gf	53.88	kJ/mol	Joback Method
hf	68.29	kJ/mol	Joback Method
hfus	-0.88	kJ/mol	Joback Method
hvap	15.30	kJ/mol	Joback Method
log10ws	0.13		Crippen Method
logp	0.369		Crippen Method
mcvol	13.010	ml/mol	McGowan Method
pc	6653.02	kPa	Joback Method
tb	198.00	K	Joback Method
tc	339.04	K	Joback Method
tf	122.50	K	Joback Method
vc	0.018	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	-10.08	J/molxK	198.00	Joback Method
cpg	-8.36	J/molxK	221.51	Joback Method
cpg	-6.92	J/molxK	245.01	Joback Method
cpg	-5.74	J/molxK	268.52	Joback Method
cpg	-4.82	J/molxK	292.03	Joback Method
cpg	-4.12	J/molxK	315.53	Joback Method
cpg	-3.65	J/molxK	339.04	Joback Method
dvisc	0.0000003	Paxs	122.50	Joback Method
dvisc	0.0000005	Paxs	135.08	Joback Method

dvisc	0.0000007	Paxs	147.67	Joback Method
dvisc	0.0000010	Paxs	160.25	Joback Method
dvisc	0.0000013	Paxs	172.83	Joback Method
dvisc	0.0000016	Paxs	185.42	Joback Method
dvisc	0.0000020	Paxs	198.00	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C12184882&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C12184882&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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