

Hydrogen cation

Inchi:	InChI=1S/H2/h1H/q+1
InchiKey:	ZZIJOQHRUPVPQC-UHFFFAOYSA-N
Formula:	H2+
SMILES:	[H][H+]
Mol. weight [g/mol]:	2.02
CAS:	12184-90-6

Physical Properties

Property code	Value	Unit	Source
hfus	-0.88	kJ/mol	Joback Method
logp	0.246		Crippen Method
mcvol	10.860	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	-10.08	J/mol×K	198.00	Joback Method
cpg	-8.36	J/mol×K	221.51	Joback Method
cpg	-6.92	J/mol×K	245.01	Joback Method
cpg	-5.74	J/mol×K	268.52	Joback Method
cpg	-4.82	J/mol×K	292.03	Joback Method
cpg	-4.12	J/mol×K	315.53	Joback Method
cpg	-3.65	J/mol×K	339.04	Joback Method
dvisc	0.0000002	Pa×s	122.50	Joback Method
dvisc	0.0000003	Pa×s	135.08	Joback Method
dvisc	0.0000005	Pa×s	147.67	Joback Method
dvisc	0.0000007	Pa×s	160.25	Joback Method
dvisc	0.0000009	Pa×s	172.83	Joback Method
dvisc	0.0000011	Pa×s	185.42	Joback Method
dvisc	0.0000013	Pa×s	198.00	Joback Method

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C12184906&Units=SI>

Joback Method:

https://en.wikipedia.org/wiki/Joback_method

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
hfus:	Enthalpy of fusion at standard conditions
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume

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<https://www.chemeo.com/cid/16-966-2/Hydrogen-cation.pdf>

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