

Hydrogen fluoride

Inchi:	InChI=1S/6FH/h6*1H
InchiKey:	CGGPGIDRFIEDLL-UHFFFAOYSA-N
Formula:	F6H6
SMILES:	F.F.F.F.F.F
Mol. weight [g/mol]:	120.04
CAS:	24993-08-6

Physical Properties

Property code	Value	Unit	Source
gf	-1429.26	kJ/mol	Joback Method
hf	-1443.23	kJ/mol	Joback Method
hfus	7.51	kJ/mol	Joback Method
hvap	11.28	kJ/mol	Joback Method
log10ws	-0.60		Crippen Method
logp	0.915		Crippen Method
mcvol	75.780	ml/mol	McGowan Method
pc	2902.98	kPa	Joback Method
tb	197.82	K	Joback Method
tc	307.25	K	Joback Method
vc	0.179	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	80.60	J/molxK	197.82	Joback Method
cpg	79.17	J/molxK	216.06	Joback Method
cpg	78.07	J/molxK	234.30	Joback Method
cpg	77.28	J/molxK	252.54	Joback Method
cpg	76.78	J/molxK	270.78	Joback Method
cpg	76.56	J/molxK	289.01	Joback Method
cpg	76.60	J/molxK	307.25	Joback Method

Sources

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=C24993086&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
vc:	Critical Volume

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