HypoFluorous acid

Inchi: InChI=1S/FHO/c1-2/h2H
InchiKey: AQYSYJUIMQTRMV-UHFFFAOYSA-N
Formula: HFO
SMILES: OF
Mol. weight [g/mol]: 36.01

Physical Properties

Property code	Value	Unit	Source
af	0.4447		Cheméo Relay (1.0)
gf	-382.51	kJ/mol	Joback Method
hf	-73.52	kJ/mol	Cheméo Relay (1.0)
hfus	2.92	kJ/mol	Joback Method
ie	12.71 ± 0.01	eV	NIST Webbook
ie	12.69 ± 0.03	eV	NIST Webbook
ie	12.71 ± 0.01	eV	NIST Webbook
logp	-0.137		Crippen Method
mcvol	18.500	ml/mol	McGowan Method
pc	7292.66	kPa	Joback Method
tb	275.47	K	Cheméo Relay (1.0)
tc	479.37	K	Cheméo Relay (1.0)
tf	156.00 ± 2.00	K	NIST Webbook
vc	0.075	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	26.85	J/mol×K	290.85	Joback Method
cpg	27.78	J/mol×K	315.94	Joback Method
cpg	28.68	J/mol×K	341.03	Joback Method
cpg	29.55	J/mol×K	366.11	Joback Method
cpg	30.41	J/mol×K	391.20	Joback Method
cpg	31.24	J/mol×K	416.29	Joback Method
cpg	32.04	J/mol×K	441.38	Joback Method

Sources

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
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C14034798&Units=SI
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

af:	Acentric Factor
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
ie:	Ionization energy
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume