Fluoromethylene

Inchi: InChI=1S/CHF/c1-2/h1H
InchiKey: YUCFVHQCAFKDQG-UHFFFAOYSA-N
Formula: CHF
SMILES: [CH]F
Mol. weight [g/mol]: 32.02
CAS: 13453-52-6

Physical Properties

Property code	Value	Unit	Source
affp	797.90	kJ/mol	NIST Webbook
basg	763.80	kJ/mol	NIST Webbook
ea	0.54 ± 0.01	eV	NIST Webbook
ea	0.56 ± 0.01	eV	NIST Webbook
ie	10.06 ± 0.05	eV	NIST Webbook
ie	10.40	eV	NIST Webbook
ie	10.49	eV	NIST Webbook
ie	10.06 ± 0.05	eV	NIST Webbook
log10ws	-0.15		Crippen Method
logp	0.624		Crippen Method
mcvol	22.420	ml/mol	McGowan Method

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C13453526&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

affp: Proton affinity

basg:	Gas basicity
ea:	Electron affinity
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume