Hydroperoxy radical

Inchi: InChI=1S/HO2/c1-2/h1H
InchiKey: OUUQCZGPVNCOIJ-UHFFFAOYSA-N
Formula: HO2
SMILES: [O]O
Mol. weight [g/mol]: 33.01
CAS: 3170-83-0

Physical Properties

Property code	Value	Unit	Source
affp	660.00	kJ/mol	NIST Webbook
basg	627.50	kJ/mol	NIST Webbook
ea	1.08 ± 0.01	eV	NIST Webbook
ea	1.08 ± 0.01	eV	NIST Webbook
ea	1.08 ± 0.02	eV	NIST Webbook
ea	1.10 ± 0.09	eV	NIST Webbook
ea	1.88 ± 0.11	eV	NIST Webbook
ie	11.35 ± 0.01	eV	NIST Webbook
ie	11.67 ± 0.15	eV	NIST Webbook
ie	11.53 ± 0.02	eV	NIST Webbook
ie	11.54	eV	NIST Webbook
ie	11.35 ± 0.01	eV	NIST Webbook
log10ws	-4.03		Crippen Method
logp	-0.110		Crippen Method
mcvol	20.450	ml/mol	McGowan Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3170830&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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