Carbon monosulfide

Inchi: InChI=1S/CS/c1-2
InchiKey: DXHPZXWIPWDXHJ-UHFFFAOYSA-N
Formula: CS
SMILES: [C]#[SH]
Mol. weight [g/mol]: 44.08
CAS: 2944-05-0

Physical Properties

Property code	Value	Unit	Source
affp	791.50	kJ/mol	NIST Webbook
basg	760.00	kJ/mol	NIST Webbook
ea	0.20 ± 0.02	eV	NIST Webbook
ea	1.60 ± 0.30	eV	NIST Webbook
hfpi	1370.00	kJ/mol	NIST Webbook
hfpiz	1360.00	kJ/mol	NIST Webbook
ie	11.39 ± 0.10	eV	NIST Webbook
ie	11.40 ± 0.10	eV	NIST Webbook
ie	11.33 ± 0.02	eV	NIST Webbook
ie	11.33 ± 0.01	eV	NIST Webbook
ie	11.33 ± 0.02	eV	NIST Webbook
ie	11.33 ± 0.01	eV	NIST Webbook
ie	11.34 ± 0.02	eV	NIST Webbook
ie	11.65	eV	NIST Webbook
ie	11.71 ± 0.03	eV	NIST Webbook
ie	11.80 ± 0.20	eV	NIST Webbook
ie	11.00 ± 0.03	eV	NIST Webbook
ie	11.34	eV	NIST Webbook
ie	11.33 ± 0.01	eV	NIST Webbook
log10ws	-0.31		Crippen Method
logp	0.462		Crippen Method
mcvol	34.850	ml/mol	McGowan Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C2944050&Units=SI

Legend

affp:	Proton affinity
basg:	Gas basicity
ea:	Electron affinity
hfpi:	Enthalpy of formation of positive ion at standard conditions
hfpiz:	Enthalpy of formation of positive ion at 0K
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume