

2-Cyclopenten-1-one, 2-hydroxy-

Other names:	2-Hydroxycyclopent-2-en-1-one 2-hydroxy-2-cyclopenten-1-one
Inchi:	InChI=1S/C5H6O2/c6-4-2-1-3-5(4)7/h2,6H,1,3H2
InchiKey:	WOPKYMRPOKFYNI-UHFFFAOYSA-N
Formula:	C5H6O2
SMILES:	O=C1CCC=C1O
Mol. weight [g/mol]:	98.10
CAS:	10493-98-8

Physical Properties

Property code	Value	Unit	Source
gf	-203.60	kJ/mol	Joback Method
hf	-309.33	kJ/mol	Joback Method
hfus	6.00	kJ/mol	Joback Method
hvap	49.17	kJ/mol	Joback Method
log10ws	-0.76		Crippen Method
logp	0.791		Crippen Method
mcvol	73.590	ml/mol	McGowan Method
pc	5594.19	kPa	Joback Method
rinpole	927.00		NIST Webbook
rinpole	905.00		NIST Webbook
rinpole	926.00		NIST Webbook
rinpole	927.00		NIST Webbook
rinpole	919.00		NIST Webbook
ripole	1769.00		NIST Webbook
ripole	1769.00		NIST Webbook
ripole	1761.00		NIST Webbook
tb	497.89	K	Joback Method
tc	708.34	K	Joback Method
tf	303.57	K	Joback Method
vc	0.270	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	153.41	J/mol×K	497.89	Joback Method
cpg	161.79	J/mol×K	532.96	Joback Method
cpg	169.80	J/mol×K	568.04	Joback Method
cpg	177.45	J/mol×K	603.11	Joback Method
cpg	184.71	J/mol×K	638.19	Joback Method
cpg	191.61	J/mol×K	673.26	Joback Method
cpg	198.12	J/mol×K	708.34	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C10493988&Units=SI

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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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