

# cyclohexyl hydroperoxide

**Inchi:** InChI=1S/C6H12O2/c7-8-6-4-2-1-3-5-6/h6-7H,1-5H2  
**InchiKey:** FGGJBCRKSVDPO-UHFFFAOYSA-N  
**Formula:** C6H12O2  
**SMILES:** OOC1CCCCC1  
**Mol. weight [g/mol]:** 116.16  
**CAS:** 766-07-4

## Physical Properties

Property code	Value	Unit	Source
chl	-3803.00 ± 3.00	kJ/mol	NIST Webbook
gf	-217.73	kJ/mol	Joback Method
hf	-214.90	kJ/mol	NIST Webbook
hfus	8.41	kJ/mol	Joback Method
hvap	48.47	kJ/mol	Joback Method
log10ws	-1.74		Crippen Method
logp	1.809		Crippen Method
mcvol	96.280	ml/mol	McGowan Method
pc	4362.63	kPa	Joback Method
tb	470.83	K	Joback Method
tc	664.73	K	Joback Method
tf	247.81	K	Joback Method
vc	0.342	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	211.94	J/molxK	470.83	Joback Method
cpg	224.52	J/molxK	503.15	Joback Method
cpg	236.54	J/molxK	535.46	Joback Method
cpg	248.02	J/molxK	567.78	Joback Method
cpg	258.95	J/molxK	600.10	Joback Method
cpg	269.34	J/molxK	632.41	Joback Method
cpg	279.19	J/molxK	664.73	Joback Method
dvisc	0.0422906	Paxs	247.81	Joback Method

dvisc	0.0094789	Paxs	284.98	Joback Method
dvisc	0.0030002	Paxs	322.15	Joback Method
dvisc	0.0012048	Paxs	359.32	Joback Method
dvisc	0.0005741	Paxs	396.49	Joback Method
dvisc	0.0003106	Paxs	433.66	Joback Method
dvisc	0.0001852	Paxs	470.83	Joback Method

## Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C766074&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C766074&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>

## Legend

<b>chl:</b>	Standard liquid enthalpy of combustion
<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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