

# 1,4-DIMETHYLCYCLOPENTENE

Inchi:	InChI=1S/C7H12/c1-6-3-4-7(2)5-6/h3,7H,4-5H2,1-2H3
InchiKey:	YYDXWNZZLPCQSL-UHFFFAOYSA-N
Formula:	C7H12
SMILES:	CC1=CCC(C)C1
Mol. weight [g/mol]:	96.17

## Physical Properties

Property code	Value	Unit	Source
gf	64.94	kJ/mol	Joback Method
hf	-81.02	kJ/mol	Joback Method
hfus	8.65	kJ/mol	Joback Method
hvap	32.39	kJ/mol	Joback Method
log10ws	-2.26		Crippen Method
logp	2.363		Crippen Method
mcvol	94.330	ml/mol	McGowan Method
pc	3505.43	kPa	Joback Method
tb	378.98	K	Joback Method
tc	576.72	K	Joback Method
tf	192.83	K	Joback Method
vc	0.354	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	164.57	J/mol×K	378.98	Joback Method
cpg	178.00	J/mol×K	411.94	Joback Method
cpg	190.80	J/mol×K	444.89	Joback Method
cpg	202.99	J/mol×K	477.85	Joback Method
cpg	214.58	J/mol×K	510.81	Joback Method
cpg	225.59	J/mol×K	543.77	Joback Method
cpg	236.05	J/mol×K	576.72	Joback Method
dvisc	0.0016528	Paxs	192.83	Joback Method
dvisc	0.0009756	Paxs	223.85	Joback Method
dvisc	0.0006547	Paxs	254.88	Joback Method

dvisc	0.0004791	Paxs	285.90	Joback Method
dvisc	0.0003727	Paxs	316.93	Joback Method
dvisc	0.0003032	Paxs	347.96	Joback Method
dvisc	0.0002552	Paxs	378.98	Joback Method

## Sources

<b>KDB:</b>	<a href="https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=621">https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=621</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>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>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<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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