

# 1,1,2,2-tetramethylcyclopentane

<b>Inchi:</b>	InChI=1S/C9H18/c1-8(2)6-5-7-9(8,3)4/h5-7H2,1-4H3
<b>InchiKey:</b>	YXDMSFJDVHXFCV-UHFFFAOYSA-N
<b>Formula:</b>	C9H18
<b>SMILES:</b>	CC1(C)CCCC1(C)C
<b>Mol. weight [g/mol]:</b>	126.24
<b>CAS:</b>	52688-89-8

## Physical Properties

Property code	Value	Unit	Source
gf	42.76	kJ/mol	Joback Method
hf	-158.47	kJ/mol	Joback Method
hfus	1.48	kJ/mol	Joback Method
hvap	33.27	kJ/mol	Joback Method
log10ws	-3.00		Crippen Method
logp	3.223		Crippen Method
mcvol	126.810	ml/mol	McGowan Method
pc	2937.70	kPa	Joback Method
tb	416.41	K	Joback Method
tc	624.78	K	Joback Method
tf	245.65	K	Joback Method
vc	0.475	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	257.55	J/molxK	416.41	Joback Method
cpg	276.80	J/molxK	451.14	Joback Method
cpg	294.48	J/molxK	485.87	Joback Method
cpg	310.77	J/molxK	520.59	Joback Method
cpg	325.84	J/molxK	555.32	Joback Method
cpg	339.87	J/molxK	590.05	Joback Method
cpg	353.03	J/molxK	624.78	Joback Method

# Sources

<b>KDB:</b>	<a href="https://www.chemie.org/files/research/kdb/mol/mol543.mol">https://www.chemie.org/files/research/kdb/mol/mol543.mol</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=C52688898&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C52688898&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>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>mccol:</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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