

# 1,3-Cyclopentadiene, 2-(2-methylpropyl)

Inchi:	InChI=1S/C9H14/c1-8(2)7-9-5-3-4-6-9/h3,5-6,8H,4,7H2,1-2H3
InchiKey:	NPRBXPWIWZJYDY-UHFFFAOYSA-N
Formula:	C9H14
SMILES:	CC(C)CC1=CCC=C1
Mol. weight [g/mol]:	122.21

## Physical Properties

Property code	Value	Unit	Source
gf	117.01	kJ/mol	Joback Method
hf	-49.46	kJ/mol	Joback Method
hfus	10.46	kJ/mol	Joback Method
hvap	37.05	kJ/mol	Joback Method
log10ws	-2.95		Crippen Method
logp	2.919		Crippen Method
mcvol	118.210	ml/mol	McGowan Method
pc	3072.75	kPa	Joback Method
rinpol	864.00		NIST Webbook
rinpol	864.00		NIST Webbook
ripol	1043.60		NIST Webbook
tb	428.13	K	Joback Method
tc	629.76	K	Joback Method
tf	205.37	K	Joback Method
vc	0.448	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	229.97	J/molxK	428.13	Joback Method
cpg	244.79	J/molxK	461.73	Joback Method
cpg	258.79	J/molxK	495.34	Joback Method
cpg	272.03	J/molxK	528.94	Joback Method
cpg	284.53	J/molxK	562.55	Joback Method
cpg	296.33	J/molxK	596.15	Joback Method
cpg	307.45	J/molxK	629.76	Joback Method

dvisc	0.0044006	Paxs	205.37	Joback Method
dvisc	0.0019215	Paxs	242.50	Joback Method
dvisc	0.0010455	Paxs	279.62	Joback Method
dvisc	0.0006561	Paxs	316.75	Joback Method
dvisc	0.0004541	Paxs	353.88	Joback Method
dvisc	0.0003370	Paxs	391.00	Joback Method
dvisc	0.0002633	Paxs	428.13	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=R40792&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R40792&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.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</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>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<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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