

# 1,1':3',1''-Tercyclopentane, 2'-dodecyl-

<b>Other names:</b>	1,3-Dicyclopentyl-2-n-dodecylcyclopentane
<b>Inchi:</b>	InChI=1S/C27H50/c1-2-3-4-5-6-7-8-9-10-11-20-27-25(23-16-12-13-17-23)21-22-26(27)2
<b>InchiKey:</b>	VBBIGDCMQXMIAS-UHFFFAOYSA-N
<b>Formula:</b>	C27H50
<b>SMILES:</b>	CCCCCCCCCCCC1C(C2CCCC2)CCC1C1CCCC1
<b>Mol. weight [g/mol]:</b>	374.69
<b>CAS:</b>	55282-68-3

## Physical Properties

Property code	Value	Unit	Source
gf	270.69	kJ/mol	Joback Method
hf	-459.85	kJ/mol	Joback Method
hfus	49.63	kJ/mol	Joback Method
hvap	75.85	kJ/mol	Joback Method
log10ws	-9.60		Crippen Method
logp	9.320		Crippen Method
mcvol	358.710	ml/mol	McGowan Method
pc	898.56	kPa	Joback Method
tb	853.66	K	Joback Method
tc	1057.94	K	Joback Method
tf	418.27	K	Joback Method
vc	1.369	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1274.45	J/molxK	853.66	Joback Method
cpg	1300.62	J/molxK	887.71	Joback Method
cpg	1325.11	J/molxK	921.75	Joback Method
cpg	1348.00	J/molxK	955.80	Joback Method
cpg	1369.39	J/molxK	989.85	Joback Method
cpg	1389.36	J/molxK	1023.90	Joback Method
cpg	1408.01	J/molxK	1057.94	Joback Method
dvisc	0.0027070	Paxs	418.27	Joback Method

dvisc	0.0012932	Paxs	490.83	Joback Method
dvisc	0.0007472	Paxs	563.40	Joback Method
dvisc	0.0004894	Paxs	635.96	Joback Method
dvisc	0.0003495	Paxs	708.53	Joback Method
dvisc	0.0002657	Paxs	781.10	Joback Method
dvisc	0.0002117	Paxs	853.66	Joback Method

## Sources

<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=C55282683&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C55282683&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>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cp<sub>g</sub>:</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>h<sub>vap</sub>:</b>	Enthalpy of vaporization at standard conditions
<b>log<sub>10</sub>ws:</b>	Log <sub>10</sub> 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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