

# 1-Butyldecalin, cis

<b>Inchi:</b>	InChI=1S/C14H26/c1-2-3-7-12-9-6-10-13-8-4-5-11-14(12)13/h12-14H,2-11H2,1H3/t12?,1
<b>InchiKey:</b>	SVAKAMBIIAHLSL-KFTPUPIBSA-N
<b>Formula:</b>	C14H26
<b>SMILES:</b>	CCCCC1CCCC2CCCCC12
<b>Mol. weight [g/mol]:</b>	194.36

## Physical Properties

Property code	Value	Unit	Source
gf	132.39	kJ/mol	Joback Method
hf	-231.67	kJ/mol	Joback Method
hfus	20.96	kJ/mol	Joback Method
hvap	46.96	kJ/mol	Joback Method
log10ws	-4.75		Crippen Method
logp	4.783		Crippen Method
mcvol	186.400	ml/mol	McGowan Method
pc	2001.91	kPa	Joback Method
rinsol	1460.00		NIST Webbook
tb	545.61	K	Joback Method
tc	753.90	K	Joback Method
tf	265.10	K	Joback Method
vc	0.701	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	486.63	J/molxK	545.61	Joback Method
cpg	596.73	J/molxK	719.18	Joback Method
cpg	577.29	J/molxK	684.47	Joback Method
cpg	556.61	J/molxK	649.75	Joback Method
cpg	534.64	J/molxK	615.04	Joback Method
cpg	511.33	J/molxK	580.32	Joback Method
cpg	614.98	J/molxK	753.90	Joback Method
dvisc	0.0003794	Paxs	545.61	Joback Method
dvisc	0.0004665	Paxs	498.86	Joback Method

dvisc	0.0005986	Paxs	452.11	Joback Method
dvisc	0.0008136	Paxs	405.36	Joback Method
dvisc	0.0011979	Paxs	358.60	Joback Method
dvisc	0.0019806	Paxs	311.85	Joback Method
dvisc	0.0039102	Paxs	265.10	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=R578128&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R578128&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>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>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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