

# Octadecane, 8-methyl-7-pentyl

<b>Inchi:</b>	InChI=1S/C24H50/c1-5-8-11-13-14-15-16-18-20-23(4)24(21-17-10-7-3)22-19-12-9-6-2/h
<b>InchiKey:</b>	BULBIFBBNLTIE-UHFFFAOYSA-N
<b>Formula:</b>	C24H50
<b>SMILES:</b>	CCCCCCCCC(C)C(CCCCC)CCCCC
<b>Mol. weight [g/mol]:</b>	338.65

## Physical Properties

Property code	Value	Unit	Source
gf	146.32	kJ/mol	Joback Method
hf	-549.25	kJ/mol	Joback Method
hfus	50.87	kJ/mol	Joback Method
hvap	68.24	kJ/mol	Joback Method
log10ws	-9.39		Crippen Method
logp	9.320		Crippen Method
mcvol	349.020	ml/mol	McGowan Method
pc	813.53	kPa	Joback Method
rinpol	2186.00		NIST Webbook
tb	747.64	K	Joback Method
tc	918.49	K	Joback Method
tf	330.24	K	Joback Method
vc	1.367	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1088.25	J/molxK	747.64	Joback Method
cpg	1111.28	J/molxK	776.12	Joback Method
cpg	1133.26	J/molxK	804.59	Joback Method
cpg	1154.22	J/molxK	833.07	Joback Method
cpg	1174.19	J/molxK	861.54	Joback Method
cpg	1193.23	J/molxK	890.02	Joback Method
cpg	1211.36	J/molxK	918.49	Joback Method
dvisc	0.0043011	Paxs	330.24	Joback Method
dvisc	0.0010669	Paxs	399.81	Joback Method

dvisc	0.0004001	Paxs	469.37	Joback Method
dvisc	0.0001933	Paxs	538.94	Joback Method
dvisc	0.0001102	Paxs	608.51	Joback Method
dvisc	0.0000706	Paxs	678.07	Joback Method
dvisc	0.0000491	Paxs	747.64	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R9440&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R9440&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>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</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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