

# Undecane, 5-butyl

<b>Inchi:</b>	InChI=1S/C15H32/c1-4-7-10-11-14-15(12-8-5-2)13-9-6-3/h15H,4-14H2,1-3H3
<b>InchiKey:</b>	FYDURCHFUJHZKF-UHFFFAOYSA-N
<b>Formula:</b>	C15H32
<b>SMILES:</b>	CCCCCCC(CCCC)CCCC
<b>Mol. weight [g/mol]:</b>	212.41

## Physical Properties

Property code	Value	Unit	Source
gf	72.98	kJ/mol	Joback Method
hf	-358.21	kJ/mol	Joback Method
hfus	31.08	kJ/mol	Joback Method
hvap	48.60	kJ/mol	Joback Method
log10ws	-5.86		Crippen Method
logp	5.953		Crippen Method
mvol	222.210	ml/mol	McGowan Method
pc	1423.99	kPa	Joback Method
rinpol	1393.00		NIST Webbook
tb	542.16	K	Joback Method
tc	703.93	K	Joback Method
tf	243.81	K	Joback Method
vc	0.870	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	558.22	J/mol×K	542.16	Joback Method
cpg	577.24	J/mol×K	569.12	Joback Method
cpg	595.52	J/mol×K	596.08	Joback Method
cpg	613.07	J/mol×K	623.04	Joback Method
cpg	629.92	J/mol×K	650.00	Joback Method
cpg	646.08	J/mol×K	676.97	Joback Method
cpg	661.59	J/mol×K	703.93	Joback Method
dvisc	0.0083877	Paxs	243.81	Joback Method
dvisc	0.0024681	Paxs	293.53	Joback Method

dvisc	0.0010352	Paxs	343.26	Joback Method
dvisc	0.0005409	Paxs	392.99	Joback Method
dvisc	0.0003270	Paxs	442.71	Joback Method
dvisc	0.0002189	Paxs	492.43	Joback Method
dvisc	0.0001577	Paxs	542.16	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R9979&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R9979&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>

## 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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