

Decane, 5-butyl

Inchi:	InChI=1S/C14H30/c1-4-7-10-13-14(11-8-5-2)12-9-6-3/h14H,4-13H2,1-3H3
InchiKey:	LSOKTBLVFMQKMC-UHFFFAOYSA-N
Formula:	C14H30
SMILES:	CCCCC(CCCC)CCCC
Mol. weight [g/mol]:	198.39

Physical Properties

Property code	Value	Unit	Source
gf	64.56	kJ/mol	Joback Method
hf	-337.57	kJ/mol	Joback Method
hfus	28.49	kJ/mol	Joback Method
hvap	46.37	kJ/mol	Joback Method
log10ws	-5.44		Crippen Method
logp	5.563		Crippen Method
mcvol	208.120	ml/mol	McGowan Method
pc	1533.06	kPa	Joback Method
rinpol	1313.00		NIST Webbook
rinpol	1313.00		NIST Webbook
rinpol	1296.00		NIST Webbook
tb	519.28	K	Joback Method
tc	681.76	K	Joback Method
tf	232.54	K	Joback Method
vc	0.814	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	506.07	J/mol×K	519.28	Joback Method
cpg	591.46	J/mol×K	654.68	Joback Method
cpg	575.74	J/mol×K	627.60	Joback Method
cpg	559.36	J/mol×K	600.52	Joback Method
cpg	542.30	J/mol×K	573.44	Joback Method
cpg	524.54	J/mol×K	546.36	Joback Method
cpg	606.55	J/mol×K	681.76	Joback Method

dvisc	0.0001730	Pa×s	519.28	Joback Method
dvisc	0.0002394	Pa×s	471.49	Joback Method
dvisc	0.0003567	Pa×s	423.70	Joback Method
dvisc	0.0005882	Pa×s	375.91	Joback Method
dvisc	0.0011218	Pa×s	328.12	Joback Method
dvisc	0.0026666	Pa×s	280.33	Joback Method
dvisc	0.0090478	Pa×s	232.54	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R8669&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/42-571-1/Decane-5-butyl.pdf>

Generated by Cheméo on 2025-12-05 07:22:43.339358876 +0000 UTC m=+4667560.869399530.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.