

Nonacosane, 2,6,10,14,19,23,27-heptamethyl

Inchi:	InChI=1S/C36H74/c1-10-31(4)21-14-23-35(8)27-15-24-32(5)19-11-12-20-33(6)25-16-28
InchiKey:	PROBMWQXWBZMED-UHFFFAOYSA-N
Formula:	C36H74
SMILES:	CCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]:	506.97

Physical Properties

Property code	Value	Unit	Source
gf	235.16	kJ/mol	Joback Method
hf	-823.33	kJ/mol	Joback Method
hfus	64.33	kJ/mol	Joback Method
hvap	93.01	kJ/mol	Joback Method
log10ws	-13.20		Crippen Method
logp	13.281		Crippen Method
mcvol	518.100	ml/mol	McGowan Method
pc	468.91	kPa	Joback Method
rinsol	3139.00		NIST Webbook
tb	1020.00	K	Joback Method
tc	1278.22	K	Joback Method
tf	390.48	K	Joback Method
vc	2.010	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1895.93	J/molxK	1020.00	Joback Method
cpg	1927.58	J/molxK	1063.04	Joback Method
cpg	1956.86	J/molxK	1106.07	Joback Method
cpg	1983.98	J/molxK	1149.11	Joback Method
cpg	2009.13	J/molxK	1192.15	Joback Method
cpg	2032.51	J/molxK	1235.19	Joback Method
cpg	2054.32	J/molxK	1278.22	Joback Method
dvisc	0.0025761	Paxs	390.48	Joback Method
dvisc	0.0002999	Paxs	495.40	Joback Method

dvisc	0.0000740	Paxs	600.32	Joback Method
dvisc	0.0000277	Paxs	705.24	Joback Method
dvisc	0.0000134	Paxs	810.16	Joback Method
dvisc	0.0000076	Paxs	915.08	Joback Method
dvisc	0.0000049	Paxs	1020.00	Joback Method

Sources

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=R214012&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
mccvol:	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

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