Nonacosane, 2,6,10,14,18,22,26-heptamethyl

Inchi: InChI=1S/C36H74/c1-10-17-31(4)20-12-21-33(6)24-14-25-35(8)28-16-29-36(9)27-15-26-
InchiKey: MAKXEDZPHRYYBQ-UHFFFAOYSA-N
Formula: C36H74
SMILES: CCCC(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
rinpol	3125.00		NIST Webbook
rinpol	3125.00		NIST Webbook
rinpol	3135.00		NIST Webbook
tb	1020.00	K	Joback Method
tc	1278.22	K	Joback Method
tf	390.48	K	Joback Method
vc	2.010	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1895.93	J/mol×K	1020.00	Joback Method
cpg	1927.58	J/mol×K	1063.04	Joback Method
cpg	1956.86	J/mol×K	1106.07	Joback Method
cpg	1983.98	J/mol×K	1149.11	Joback Method
cpg	2009.13	J/mol×K	1192.15	Joback Method
cpg	2032.51	J/mol×K	1235.19	Joback Method
cpg	2054.32	J/mol×K	1278.22	Joback Method

dvisc	0.0025761	Pa×s	390.48	Joback Method
dvisc	0.0002999	Pa×s	495.40	Joback Method
dvisc	0.0000740	Pa×s	600.32	Joback Method
dvisc	0.0000277	Pa×s	705.24	Joback Method
dvisc	0.0000134	Pa×s	810.16	Joback Method
dvisc	0.0000076	Pa×s	915.08	Joback Method
dvisc	0.0000049	Pa×s	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=R213811&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
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