4,8,12,16-Tetramethylhentriacontane

Inchi: InChI=1S/C35H72/c1-7-9-10-11-12-13-14-15-16-17-18-19-20-25-33(4)27-22-29-35(6)31-
InchiKey: GUBQHASWXWQXLD-UHFFFAOYSA-N
Formula: C35H72
SMILES: CCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCCC(C)CCC
Mol. weight [g/mol]: 492.95

Physical Properties

Property code	Value	Unit	Source
gf	234.06	kJ/mol	Joback Method
hf	-786.85	kJ/mol	Joback Method
hfus	72.31	kJ/mol	Joback Method
hvap	91.95	kJ/mol	Joback Method
log10ws	-13.51		Crippen Method
logp	13.323		Crippen Method
mcvol	504.010	ml/mol	McGowan Method
pc	483.88	kPa	Joback Method
rinpol	3249.00		NIST Webbook
rinpol	3249.00		NIST Webbook
rinpol	3249.00		NIST Webbook
tb	998.44	K	Joback Method
tc	1252.51	K	Joback Method
tf	424.21	K	Joback Method
vc	1.972	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1825.95	J/mol×K	998.44	Joback Method
cpg	1857.72	J/mol×K	1040.79	Joback Method
cpg	1887.22	J/mol×K	1083.13	Joback Method
cpg	1914.63	J/mol×K	1125.48	Joback Method
cpg	1940.13	J/mol×K	1167.82	Joback Method
cpg	1963.91	J/mol×K	1210.17	Joback Method
cpg	1986.16	J/mol×K	1252.51	Joback Method

dvisc	0.0012491	Pa×s	424.21	Joback Method
dvisc	0.0002446	Pa×s	519.92	Joback Method
dvisc	0.0000795	Pa×s	615.62	Joback Method
dvisc	0.0000350	Pa×s	711.33	Joback Method
dvisc	0.0000187	Pa×s	807.03	Joback Method
dvisc	0.0000114	Pa×s	902.74	Joback Method
dvisc	0.0000077	Pa×s	998.44	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R505427&Units=SI
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

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