3,7,11,15-tetramethyl-hentriacontane

Inchi: InChI=1S/C35H72/c1-7-9-10-11-12-13-14-15-16-17-18-19-20-21-25-33(4)28-23-29-35(6)
InchiKey: CXJXEXGRXNLYLF-UHFFFAOYSA-N
Formula: C35H72
SMILES: CCCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCCC(C)CC
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	3260.00		NIST Webbook
rinpol	3261.00		NIST Webbook
rinpol	3261.00		NIST Webbook
rinpol	3257.00		NIST Webbook
rinpol	3257.00		NIST Webbook
rinpol	3260.00		NIST Webbook
rinpol	3261.00		NIST Webbook
rinpol	3260.00		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

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=R272305&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