Hentriacontane, 9,13,17-trimethyl

Other names: 9,13,17-trimethylhentriacontane
Inchi: InChI=1S/C34H70/c1-6-8-10-12-14-15-16-17-18-19-21-23-27-33(4)29-25-31-34(5)30-24-
InchiKey: IALBJVPPLHMBDR-UHFFFAOYSA-N
Formula: C34H70
SMILES: CCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCCCCCCC
Mol. weight [g/mol]: 478.92

Physical Properties

Property code	Value	Unit	Source
gf	228.08	kJ/mol	Joback Method
hf	-760.93	kJ/mol	Joback Method
hfus	73.25	kJ/mol	Joback Method
hvap	90.11	kJ/mol	Joback Method
log10ws	-13.33		Crippen Method
logp	13.077		Crippen Method
mcvol	489.920	ml/mol	McGowan Method
pc	503.18	kPa	Joback Method
rinpol	3189.00		NIST Webbook
rinpol	3189.00		NIST Webbook
rinpol	3187.00		NIST Webbook
rinpol	3192.20		NIST Webbook
tb	976.00	K	Joback Method
tc	1219.59	K	Joback Method
tf	427.94	K	Joback Method
vc	1.921	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1756.49	J/mol×K	976.00	Joback Method
cpg	1787.41	J/mol×K	1016.60	Joback Method
cpg	1816.22	J/mol×K	1057.20	Joback Method
cpg	1843.08	J/mol×K	1097.80	Joback Method
cpg	1868.13	J/mol×K	1138.39	Joback Method

cpg	1891.56	J/mol×K	1178.99	Joback Method
cpg	1913.50	J/mol×K	1219.59	Joback Method
dvisc	0.0011513	Pa×s	427.94	Joback Method
dvisc	0.0002594	Pa×s	519.28	Joback Method
dvisc	0.0000913	Pa×s	610.63	Joback Method
dvisc	0.0000422	Pa×s	701.97	Joback Method
dvisc	0.0000233	Pa×s	793.31	Joback Method
dvisc	0.0000145	Pa×s	884.66	Joback Method
dvisc	0.0000099	Pa×s	976.00	Joback Method

Sources

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=R195194&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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