3,7,11-trimethyl-hentriacontane

Inchi: InChI=1S/C34H70/c1-6-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-27-33(4)30-
InchiKey: FVYJAIJIAUBPDV-UHFFFAOYSA-N
Formula: C34H70
SMILES: CCCCCCCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CC
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	3234.00		NIST Webbook
rinpol	3236.00		NIST Webbook
rinpol	3237.00		NIST Webbook
rinpol	3237.00		NIST Webbook
rinpol	3236.00		NIST Webbook
rinpol	3236.00		NIST Webbook
rinpol	3237.00		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=R272325&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