Triacontane, 9,13-dimethyl

Inchi: InChI=1S/C32H66/c1-5-7-9-11-13-14-15-16-17-18-19-20-21-23-25-28-32(4)30-26-29-31(
InchiKey: OZPWZHUIPOLOCY-UHFFFAOYSA-N
Formula: C32H66
SMILES: CCCCCCCCCCCCCCCCCC(C)CCCC(C)CCCCCCCC
Mol. weight [g/mol]: 450.87

Physical Properties

Property code	Value	Unit	Source
gf	213.68	kJ/mol	Joback Method
hf	-714.37	kJ/mol	Joback Method
hfus	71.59	kJ/mol	Joback Method
hvap	86.05	kJ/mol	Joback Method
log10ws	-12.73		Crippen Method
logp	12.441		Crippen Method
mcvol	461.740	ml/mol	McGowan Method
pc	547.43	kPa	Joback Method
rinpol	3067.00		NIST Webbook
rinpol	3067.00		NIST Webbook
tb	930.68	K	Joback Method
tc	1153.00	K	Joback Method
tf	420.40	K	Joback Method
vc	1.815	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1618.68	J/mol×K	930.68	Joback Method
cpg	1647.60	J/mol×K	967.73	Joback Method
cpg	1674.72	J/mol×K	1004.79	Joback Method
cpg	1700.16	J/mol×K	1041.84	Joback Method
cpg	1724.04	J/mol×K	1078.89	Joback Method
cpg	1746.45	J/mol×K	1115.95	Joback Method
cpg	1767.52	J/mol×K	1153.00	Joback Method
dvisc	0.0012543	Pa×s	420.40	Joback Method

dvisc	0.0003218	Pa×s	505.45	Joback Method
dvisc	0.0001222	Pa×s	590.49	Joback Method
dvisc	0.0000592	Pa×s	675.54	Joback Method
dvisc	0.0000337	Pa×s	760.59	Joback Method
dvisc	0.0000215	Pa×s	845.63	Joback Method
dvisc	0.0000149	Pa×s	930.68	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=R528277&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