2,10,14,18-Tetramethyltetratriacontane

Inchi: InChI=1S/C38H78/c1-7-8-9-10-11-12-13-14-15-16-17-18-21-24-29-36(4)31-26-33-38(6)3
InchiKey: YQASFENYGPKWTD-UHFFFAOYSA-N
Formula: C38H78
SMILES: CCCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCCCCCCC(C)C
Mol. weight [g/mol]: 535.03

Physical Properties

Property code	Value	Unit	Source
gf	259.32	kJ/mol	Joback Method
hf	-848.77	kJ/mol	Joback Method
hfus	80.08	kJ/mol	Joback Method
hvap	98.63	kJ/mol	Joback Method
log10ws	-14.76		Crippen Method
logp	14.493		Crippen Method
mcvol	546.280	ml/mol	McGowan Method
pc	427.94	kPa	Joback Method
rinpol	3445.00		NIST Webbook
rinpol	3445.00		NIST Webbook
tb	1067.08	K	Joback Method
tc	1371.50	K	Joback Method
tf	458.02	K	Joback Method
vc	2.139	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2035.23	J/mol×K	1067.08	Joback Method
cpg	2071.61	J/mol×K	1117.82	Joback Method
cpg	2104.98	J/mol×K	1168.55	Joback Method
cpg	2135.69	J/mol×K	1219.29	Joback Method
cpg	2164.08	J/mol×K	1270.03	Joback Method
cpg	2190.49	J/mol×K	1320.77	Joback Method
cpg	2215.28	J/mol×K	1371.50	Joback Method
dvisc	0.0007191	Pa×s	458.02	Joback Method

dvisc	0.0001452	Pa×s	559.53	Joback Method
dvisc	0.0000479	Pa×s	661.04	Joback Method
dvisc	0.0000212	Pa×s	762.55	Joback Method
dvisc	0.0000114	Pa×s	864.06	Joback Method
dvisc	0.0000070	Pa×s	965.57	Joback Method
dvisc	0.0000047	Pa×s	1067.08	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=R337670&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