2,18-Dimethylhexatriacontane

Inchi: InChI=1S/C38H78/c1-5-6-7-8-9-10-11-12-13-14-17-20-23-26-29-32-35-38(4)36-33-30-27
InchiKey: ZNDWAIXSBPSWPH-UHFFFAOYSA-N
Formula: C38H78
SMILES: CCCCCCCCCCCCCCCCCCC(C)CCCCCCCCCCCCCCCCC(C)C
Mol. weight [g/mol]: 535.03

Physical Properties

Property code	Value	Unit	Source
gf	264.20	kJ/mol	Joback Method
hf	-838.21	kJ/mol	Joback Method
hfus	87.13	kJ/mol	Joback Method
hvap	99.41	kJ/mol	Joback Method
log10ws	-15.25		Crippen Method
logp	14.782		Crippen Method
mcvol	546.280	ml/mol	McGowan Method
pc	425.12	kPa	Joback Method
rinpol	3700.00		NIST Webbook
rinpol	3700.00		NIST Webbook
tb	1067.96	K	Joback Method
tc	1383.24	K	Joback Method
tf	488.02	K	Joback Method
vc	2.151	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2035.13	J/mol×K	1067.96	Joback Method
cpg	2196.76	J/mol×K	1330.69	Joback Method
cpg	2169.20	J/mol×K	1278.14	Joback Method
cpg	2139.64	J/mol×K	1225.60	Joback Method
cpg	2107.70	J/mol×K	1173.05	Joback Method
cpg	2072.99	J/mol×K	1120.51	Joback Method
cpg	2222.69	J/mol×K	1383.24	Joback Method
dvisc	0.0000057	Pa×s	1067.96	Joback Method

dvisc	0.0000082	Pa×s	971.30	Joback Method
dvisc	0.0000129	Pa×s	874.65	Joback Method
dvisc	0.0000227	Pa×s	777.99	Joback Method
dvisc	0.0000467	Pa×s	681.33	Joback Method
dvisc	0.0001222	Pa×s	584.68	Joback Method
dvisc	0.0004682	Pa×s	488.02	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=R337907&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