17-methylnonatriacontane

Inchi: InChI=1S/C40H82/c1-4-6-8-10-12-14-16-18-20-21-22-23-24-25-27-29-31-33-35-37-39-40
InchiKey: TWOVDIPCKCJATJ-UHFFFAOYSA-N
Formula: C40H82
SMILES: CCCCCCCCCCCCCCCCCCCCCCC(C)CCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 563.08

Physical Properties

Property code	Value	Unit	Source
gf	283.48	kJ/mol	Joback Method
hf	-874.21	kJ/mol	Joback Method
hfus	95.83	kJ/mol	Joback Method
hvap	104.25	kJ/mol	Joback Method
log10ws	-16.32		Crippen Method
logp	15.706		Crippen Method
mcvol	574.460	ml/mol	McGowan Method
pc	392.12	kPa	Joback Method
rinpol	3920.00		NIST Webbook
rinpol	3920.00		NIST Webbook
tb	1114.16	K	Joback Method
tc	1483.64	K	Joback Method
tf	525.56	K	Joback Method
vc	2.269	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2176.07	J/mol×K	1114.16	Joback Method
cpg	2219.21	J/mol×K	1175.74	Joback Method
cpg	2258.42	J/mol×K	1237.32	Joback Method
cpg	2294.36	J/mol×K	1298.90	Joback Method
cpg	2327.67	J/mol×K	1360.48	Joback Method
cpg	2359.01	J/mol×K	1422.06	Joback Method
cpg	2389.02	J/mol×K	1483.64	Joback Method
dvisc	0.0002820	Pa×s	525.56	Joback Method

dvisc	0.0000823	Pa×s	623.66	Joback Method
dvisc	0.0000336	Pa×s	721.76	Joback Method
dvisc	0.0000170	Pa×s	819.86	Joback Method
dvisc	0.0000099	Pa×s	917.96	Joback Method
dvisc	0.0000064	Pa×s	1016.06	Joback Method
dvisc	0.0000045	Pa×s	1114.16	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=R280138&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