7,13-Dimethylnonatriacontane

Inchi: InChI=1S/C41H84/c1-5-7-9-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29
InchiKey: PQICEKZMTWQGFQ-UHFFFAOYSA-N
Formula: C41H84
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCC(C)CCCCCC(C)CCCCCC
Mol. weight [g/mol]: 577.11

Physical Properties

Property code	Value	Unit	Source
gf	289.46	kJ/mol	Joback Method
hf	-900.13	kJ/mol	Joback Method
hfus	94.90	kJ/mol	Joback Method
hvap	106.08	kJ/mol	Joback Method
log10ws	-16.50		Crippen Method
logp	15.952		Crippen Method
mcvol	588.550	ml/mol	McGowan Method
pc	378.80	kPa	Joback Method
rinpol	3853.00		NIST Webbook
rinpol	3853.00		NIST Webbook
tb	1136.60	K	Joback Method
tc	1525.89	K	Joback Method
tf	521.83	K	Joback Method
vc	2.320	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2246.73	J/mol×K	1136.60	Joback Method
cpg	2435.56	J/mol×K	1461.01	Joback Method
cpg	2403.06	J/mol×K	1396.13	Joback Method
cpg	2368.72	J/mol×K	1331.25	Joback Method
cpg	2331.73	J/mol×K	1266.36	Joback Method
cpg	2291.33	J/mol×K	1201.48	Joback Method
cpg	2466.97	J/mol×K	1525.89	Joback Method
dvisc	0.0000035	Pa×s	1136.60	Joback Method

dvisc	0.0000050	Pa×s	1034.14	Joback Method
dvisc	0.0000079	Pa×s	931.68	Joback Method
dvisc	0.0000138	Pa×s	829.21	Joback Method
dvisc	0.0000284	Pa×s	726.75	Joback Method
dvisc	0.0000742	Pa×s	624.29	Joback Method
dvisc	0.0002822	Pa×s	521.83	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R539430&Units=SI
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

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