Hexatriacontane, 12-methyl

Inchi: InChI=1S/C37H76/c1-4-6-8-10-12-14-15-16-17-18-19-20-21-22-23-24-25-26-28-30-32-34
InchiKey: WYEFHKSBGGIUIU-UHFFFAOYSA-N
Formula: C37H76
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCC(C)CCCCCCCCCCC
Mol. weight [g/mol]: 521.00

Physical Properties

Property code	Value	Unit	Source
gf	258.22	kJ/mol	Joback Method
hf	-812.29	kJ/mol	Joback Method
hfus	88.06	kJ/mol	Joback Method
hvap	97.57	kJ/mol	Joback Method
log10ws	-15.07		Crippen Method
logp	14.536		Crippen Method
mcvol	532.190	ml/mol	McGowan Method
pc	440.98	kPa	Joback Method
rinpol	3626.00		NIST Webbook
tb	1045.52	K	Joback Method
tc	1345.85	K	Joback Method
tf	491.75	K	Joback Method
vc	2.102	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1964.92	J/mol×K	1045.52	Joback Method
cpg	2001.61	J/mol×K	1095.58	Joback Method
cpg	2035.39	J/mol×K	1145.63	Joback Method
cpg	2066.56	J/mol×K	1195.69	Joback Method
cpg	2095.46	J/mol×K	1245.74	Joback Method
cpg	2122.39	J/mol×K	1295.80	Joback Method
cpg	2147.70	J/mol×K	1345.85	Joback Method
dvisc	0.0004573	Pa×s	491.75	Joback Method
dvisc	0.0001335	Pa×s	584.04	Joback Method

dvisc	0.0000545	Pa×s	676.34	Joback Method
dvisc	0.0000276	Pa×s	768.63	Joback Method
dvisc	0.0000162	Pa×s	860.93	Joback Method
dvisc	0.0000105	Pa×s	953.22	Joback Method
dvisc	0.0000074	Pa×s	1045.52	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R584257&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

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