Heptatriacontane, 5-methyl-

Inchi: InChI=1S/C38H78/c1-4-6-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-
InchiKey: KTPVYUQVWGQPAT-UHFFFAOYSA-N
Formula: C38H78
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC(C)CCCC
Mol. weight [g/mol]: 535.03

Physical Properties

Property code	Value	Unit	Source
gf	266.64	kJ/mol	Joback Method
hf	-832.93	kJ/mol	Joback Method
hfus	90.65	kJ/mol	Joback Method
hvap	99.79	kJ/mol	Joback Method
log10ws	-15.49		Crippen Method
logp	14.926		Crippen Method
mcvol	546.280	ml/mol	McGowan Method
pc	423.73	kPa	Joback Method
rinpol	3747.00		NIST Webbook
rinpol	3753.00		NIST Webbook
rinpol	3749.00		NIST Webbook
tb	1068.40	K	Joback Method
tc	1389.46	K	Joback Method
tf	503.02	K	Joback Method
vc	2.158	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2035.08	J/mol×K	1068.40	Joback Method
cpg	2073.73	J/mol×K	1121.91	Joback Method
cpg	2109.16	J/mol×K	1175.42	Joback Method
cpg	2141.75	J/mol×K	1228.93	Joback Method
cpg	2171.93	J/mol×K	1282.44	Joback Method
cpg	2200.09	J/mol×K	1335.95	Joback Method
cpg	2226.65	J/mol×K	1389.46	Joback Method

dvisc	0.0003897	Pa×s	503.02	Joback Method
dvisc	0.0001137	Pa×s	597.25	Joback Method
dvisc	0.0000464	Pa×s	691.48	Joback Method
dvisc	0.0000235	Pa×s	785.71	Joback Method
dvisc	0.0000138	Pa×s	879.94	Joback Method
dvisc	0.0000089	Pa×s	974.17	Joback Method
dvisc	0.0000063	Pa×s	1068.40	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=R203755&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