Heptacosane, 2,6,10,14,18,22,26-heptamethyl

Inchi: InChI=1S/C34H70/c1-28(2)16-10-18-30(5)20-12-22-32(7)24-14-26-34(9)27-15-25-33(8)2
InchiKey: NTBUHEPHLHTICO-UHFFFAOYSA-N
Formula: C34H70
SMILES: CC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 478.92

Physical Properties

Property code	Value	Unit	Source
gf	218.32	kJ/mol	Joback Method
hf	-782.05	kJ/mol	Joback Method
hfus	59.16	kJ/mol	Joback Method
hvap	88.56	kJ/mol	Joback Method
log10ws	-12.36		Crippen Method
logp	12.501		Crippen Method
mcvol	489.920	ml/mol	McGowan Method
pc	510.48	kPa	Joback Method
rinpol	2937.00		NIST Webbook
rinpol	2937.00		NIST Webbook
rinpol	2937.00		NIST Webbook
rinpol	2937.00		NIST Webbook
tb	974.24	K	Joback Method
tc	1207.35	K	Joback Method
tf	367.94	K	Joback Method
vc	1.897	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1757.45	J/mol×K	974.24	Joback Method
cpg	1885.92	J/mol×K	1168.50	Joback Method
cpg	1863.68	J/mol×K	1129.65	Joback Method
cpg	1839.85	J/mol×K	1090.79	Joback Method
cpg	1814.30	J/mol×K	1051.94	Joback Method
cpg	1786.87	J/mol×K	1013.09	Joback Method

cpg	1906.71	J/mol×K	1207.35	Joback Method
dvisc	0.0000068	Pa×s	974.24	Joback Method
dvisc	0.0000107	Pa×s	873.19	Joback Method
dvisc	0.0000188	Pa×s	772.14	Joback Method
dvisc	0.0000392	Pa×s	671.09	Joback Method
dvisc	0.0001063	Pa×s	570.04	Joback Method
dvisc	0.0004431	Pa×s	468.99	Joback Method
dvisc	0.0040453	Pa×s	367.94	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=R213797&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

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