3,7,11,15,18-Pentamethyltriacontane

Inchi: InChI=1S/C35H72/c1-8-10-11-12-13-14-15-16-17-18-22-34(6)29-30-35(7)28-21-27-33(5)
InchiKey: SEBDCFHTWZYJFE-UHFFFAOYSA-N
Formula: C35H72
SMILES: CCCCCCCCCCCCC(C)CCC(C)CCCC(C)CCCC(C)CCCC(C)CC
Mol. weight [g/mol]: 492.95

Physical Properties

Property code	Value	Unit	Source
gf	231.62	kJ/mol	Joback Method
hf	-792.13	kJ/mol	Joback Method
hfus	68.79	kJ/mol	Joback Method
hvap	91.56	kJ/mol	Joback Method
log10ws	-13.26		Crippen Method
logp	13.179		Crippen Method
mcvol	504.010	ml/mol	McGowan Method
pc	485.59	kPa	Joback Method
rinpol	3187.00		NIST Webbook
tb	998.00	K	Joback Method
tc	1248.84	K	Joback Method
tf	409.21	K	Joback Method
vc	1.966	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1826.15	J/mol×K	998.00	Joback Method
cpg	1962.13	J/mol×K	1207.03	Joback Method
cpg	1938.70	J/mol×K	1165.22	Joback Method
cpg	1913.56	J/mol×K	1123.42	Joback Method
cpg	1886.54	J/mol×K	1081.61	Joback Method
cpg	1857.47	J/mol×K	1039.81	Joback Method
cpg	1984.03	J/mol×K	1248.84	Joback Method
dvisc	0.0000070	Pa×s	998.00	Joback Method
dvisc	0.0000106	Pa×s	899.87	Joback Method

dvisc	0.0000177	Pa×s	801.74	Joback Method
dvisc	0.0000342	Pa×s	703.61	Joback Method
dvisc	0.0000820	Pa×s	605.47	Joback Method
dvisc	0.0002757	Pa×s	507.34	Joback Method
dvisc	0.0016578	Pa×s	409.21	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R501198&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