10,16 -Dimethyldotriacontane

Inchi: InChI=1S/C34H70/c1-5-7-9-11-13-14-15-16-17-18-19-21-23-26-30-34(4)32-28-24-27-31-
InchiKey: XLBAGPPGKPWUEH-UHFFFAOYSA-N
Formula: C34H70
SMILES: CCCCCCCCCCCCCCCCC(C)CCCCCC(C)CCCCCCCCC
Mol. weight [g/mol]: 478.92

Physical Properties

Property code	Value	Unit	Source
gf	230.52	kJ/mol	Joback Method
hf	-755.65	kJ/mol	Joback Method
hfus	76.77	kJ/mol	Joback Method
hvap	90.50	kJ/mol	Joback Method
log10ws	-13.57		Crippen Method
logp	13.221		Crippen Method
mcvol	489.920	ml/mol	McGowan Method
pc	501.37	kPa	Joback Method
rinpol	3261.00		NIST Webbook
rinpol	3261.00		NIST Webbook
tb	976.44	K	Joback Method
tc	1223.09	K	Joback Method
tf	442.94	K	Joback Method
vc	1.927	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1756.26	J/mol×K	976.44	Joback Method
cpg	1787.61	J/mol×K	1017.55	Joback Method
cpg	1816.81	J/mol×K	1058.66	Joback Method
cpg	1844.04	J/mol×K	1099.77	Joback Method
cpg	1869.45	J/mol×K	1140.87	Joback Method
cpg	1893.20	J/mol×K	1181.98	Joback Method
cpg	1915.47	J/mol×K	1223.09	Joback Method
dvisc	0.0009072	Pa×s	442.94	Joback Method

dvisc	0.0002342	Pa×s	531.86	Joback Method
dvisc	0.0000891	Pa×s	620.77	Joback Method
dvisc	0.0000432	Pa×s	709.69	Joback Method
dvisc	0.0000246	Pa×s	798.61	Joback Method
dvisc	0.0000157	Pa×s	887.52	Joback Method
dvisc	0.0000109	Pa×s	976.44	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R337358&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