12-Methyltetratriacontane

Inchi: InChI=1S/C35H72/c1-4-6-8-10-12-14-15-16-17-18-19-20-21-22-23-24-26-28-30-32-34-35
InchiKey: FGVIHAWLRZDGRM-UHFFFAOYSA-N
Formula: C35H72
SMILES: CCCCCCCCCCCCCCCCCCCCCCCC(C)CCCCCCCCCC
Mol. weight [g/mol]: 492.95

Physical Properties

Property code	Value	Unit	Source
gf	241.38	kJ/mol	Joback Method
hf	-771.01	kJ/mol	Joback Method
hfus	82.88	kJ/mol	Joback Method
hvap	93.12	kJ/mol	Joback Method
log10ws	-14.23		Crippen Method
logp	13.755		Crippen Method
mcvol	504.010	ml/mol	McGowan Method
pc	478.81	kPa	Joback Method
rinpol	3430.00		NIST Webbook
rinpol	3432.00		NIST Webbook
rinpol	3435.00		NIST Webbook
rinpol	3426.00		NIST Webbook
rinpol	3426.00		NIST Webbook
rinpol	3435.00		NIST Webbook
rinpol	3430.00		NIST Webbook
tb	999.76	K	Joback Method
tc	1264.67	K	Joback Method
tf	469.21	K	Joback Method
vc	1.990	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1825.36	J/mol×K	999.76	Joback Method
cpg	1969.88	J/mol×K	1220.52	Joback Method
cpg	1944.94	J/mol×K	1176.37	Joback Method

cpg	1918.23	J/mol×K	1132.22	Joback Method
cpg	1889.54	J/mol×K	1088.06	Joback Method
cpg	1858.65	J/mol×K	1043.91	Joback Method
cpg	1993.26	J/mol×K	1264.67	Joback Method
dvisc	0.0000102	Pa×s	999.76	Joback Method
dvisc	0.0000145	Pa×s	911.34	Joback Method
dvisc	0.0000223	Pa×s	822.91	Joback Method
dvisc	0.0000379	Pa×s	734.48	Joback Method
dvisc	0.0000748	Pa×s	646.06	Joback Method
dvisc	0.0001830	Pa×s	557.63	Joback Method
dvisc	0.0006270	Pa×s	469.21	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R272003&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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