11,15-Dimethylpentatriacontane

Other names: Pentatriacontane, 11,15-dimethyl
Inchi: InChI=1S/C37H76/c1-5-7-9-11-13-15-16-17-18-19-20-21-22-23-24-26-28-30-33-37(4)35-
InchiKey: PFWHBIJHNFAHQI-UHFFFAOYSA-N
Formula: C37H76
SMILES: CCCCCCCCCCCCCCCCCCCCC(C)CCCC(C)CCCCCCCCCC
Mol. weight [g/mol]: 521.00
CAS: 56987-84-9

Physical Properties

Property code	Value	Unit	Source
gf	255.78	kJ/mol	Joback Method
hf	-817.57	kJ/mol	Joback Method
hfus	84.54	kJ/mol	Joback Method
hvap	97.18	kJ/mol	Joback Method
log10ws	-14.83		Crippen Method
logp	14.391		Crippen Method
mcvol	532.190	ml/mol	McGowan Method
pc	442.47	kPa	Joback Method
rinpol	3555.00		NIST Webbook
rinpol	3556.00		NIST Webbook
rinpol	3556.00		NIST Webbook
rinpol	3559.00		NIST Webbook
rinpol	3556.00		NIST Webbook
rinpol	3542.00		NIST Webbook
rinpol	3555.00		NIST Webbook
rinpol	3560.00		NIST Webbook
rinpol	3555.00		NIST Webbook
rinpol	3542.00		NIST Webbook
tb	1045.08	K	Joback Method
tc	1340.34	K	Joback Method
tf	476.75	K	Joback Method
vc	2.095	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1965.02	J/mol×K	1045.08	Joback Method
cpg	2001.02	J/mol×K	1094.29	Joback Method
cpg	2034.16	J/mol×K	1143.50	Joback Method
cpg	2064.75	J/mol×K	1192.71	Joback Method
cpg	2093.10	J/mol×K	1241.92	Joback Method
cpg	2119.51	J/mol×K	1291.13	Joback Method
cpg	2144.28	J/mol×K	1340.34	Joback Method
dvisc	0.0005532	Pa×s	476.75	Joback Method
dvisc	0.0001441	Pa×s	571.47	Joback Method
dvisc	0.0000550	Pa×s	666.19	Joback Method
dvisc	0.0000267	Pa×s	760.91	Joback Method
dvisc	0.0000152	Pa×s	855.64	Joback Method
dvisc	0.0000097	Pa×s	950.36	Joback Method
dvisc	0.0000067	Pa×s	1045.08	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=C56987849&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