13,17,21-Trimethyltetratriacontane

Inchi: InChI=1S/C37H76/c1-6-8-10-12-14-16-18-20-22-24-26-30-36(4)32-28-34-37(5)33-27-31-
InchiKey: YCPQJCQPWJZPHF-UHFFFAOYSA-N
Formula: C37H76
SMILES: CCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCCCCCCCCCCC
Mol. weight [g/mol]: 521.00

Physical Properties

Property code	Value	Unit	Source
gf	253.34	kJ/mol	Joback Method
hf	-822.85	kJ/mol	Joback Method
hfus	81.02	kJ/mol	Joback Method
hvap	96.79	kJ/mol	Joback Method
log10ws	-14.59		Crippen Method
logp	14.247		Crippen Method
mcvol	532.190	ml/mol	McGowan Method
pc	443.96	kPa	Joback Method
rinpol	3484.00		NIST Webbook
tb	1044.64	K	Joback Method
tc	1335.05	K	Joback Method
tf	461.75	K	Joback Method
vc	2.090	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1965.12	J/mol×K	1044.64	Joback Method
cpg	2000.46	J/mol×K	1093.04	Joback Method
cpg	2032.99	J/mol×K	1141.44	Joback Method
cpg	2063.03	J/mol×K	1189.85	Joback Method
cpg	2090.85	J/mol×K	1238.25	Joback Method
cpg	2116.75	J/mol×K	1286.65	Joback Method
cpg	2141.02	J/mol×K	1335.05	Joback Method
dvisc	0.0006836	Pa×s	461.75	Joback Method
dvisc	0.0001570	Pa×s	558.90	Joback Method

dvisc	0.0000558	Pa×s	656.05	Joback Method
dvisc	0.0000259	Pa×s	753.19	Joback Method
dvisc	0.0000143	Pa×s	850.34	Joback Method
dvisc	0.0000089	Pa×s	947.49	Joback Method
dvisc	0.0000061	Pa×s	1044.64	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=R530537&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