4,8,12-trimethyl-tetratriacontane

Inchi: InChI=1S/C37H76/c1-6-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-30-36
InchiKey: ZDTFBKSOWFOLKX-UHFFFAOYSA-N
Formula: C37H76
SMILES: CCCCCCCCCCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCC
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	3520.00		NIST Webbook
rinpol	3516.00		NIST Webbook
rinpol	3520.00		NIST Webbook
rinpol	3516.00		NIST Webbook
rinpol	3520.00		NIST Webbook
rinpol	3516.00		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=R272474&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

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