5,9,13-trimethylnonacosane

Inchi: InChI=1S/C32H66/c1-6-8-10-11-12-13-14-15-16-17-18-19-20-21-25-31(4)27-23-29-32(5)28-24-30(3)26-22-9-7-2/h30-32H,6-29H2,1-5H3

InchiKey: PIOISYJJQUFRLD-UHFFFAOYSA-N

Formula: C32H66

SMILES: CCCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCCC

Mol. weight [g/mol]: 450.87

Physical Properties

Property code	Value	Unit	Source
gf	211.24	kJ/mol	Joback Method
hf	-719.65	kJ/mol	Joback Method
hfus	68.07	kJ/mol	Joback Method
hvap	85.66	kJ/mol	Joback Method
log10ws	-12.49		Crippen Method
logp	12.297		Crippen Method
mcvol	461.740	ml/mol	McGowan Method
pc	549.49	kPa	Joback Method
rinpol	3009.00		NIST Webbook
rinpol	3009.00		NIST Webbook
tb	930.24	K	Joback Method
tc	1150.49	K	Joback Method
tf	405.40	K	Joback Method
vc	1.810	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1618.98	J/mol×K	930.24	Joback Method
cpg	1647.60	J/mol×K	966.95	Joback Method
cpg	1674.45	J/mol×K	1003.66	Joback Method
cpg	1699.63	J/mol×K	1040.36	Joback Method
cpg	1723.25	J/mol×K	1077.07	Joback Method
cpg	1745.43	J/mol×K	1113.78	Joback Method
cpg	1766.27	J/mol×K	1150.49	Joback Method
dvisc	0.0016243	Pa×s	405.40	Joback Method

dvisc	0.0003607	Pa×s	492.87	Joback Method
dvisc	0.0001261	Pa×s	580.35	Joback Method
dvisc	0.0000581	Pa×s	667.82	Joback Method
dvisc	0.0000320	Pa×s	755.29	Joback Method
dvisc	0.0000199	Pa×s	842.77	Joback Method
dvisc	0.0000136	Pa×s	930.24	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=R280316&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