4,8,12-Trimethyltetracosane

Inchi: InChI=1S/C27H56/c1-6-8-9-10-11-12-13-14-15-16-20-26(4)22-18-24-27(5)23-17-21-25(3
InchiKey: NQRQGQTVYJRPJC-UHFFFAOYSA-N
Formula: C27H56
SMILES: CCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCC
Mol. weight [g/mol]: 380.73

Physical Properties

Property code	Value	Unit	Source
gf	169.14	kJ/mol	Joback Method
hf	-616.45	kJ/mol	Joback Method
hfus	55.12	kJ/mol	Joback Method
hvap	74.53	kJ/mol	Joback Method
log10ws	-10.40		Crippen Method
logp	10.346		Crippen Method
mcvol	391.290	ml/mol	McGowan Method
pc	697.65	kPa	Joback Method
rinpol	2520.00		NIST Webbook
rinpol	2520.00		NIST Webbook
tb	815.84	K	Joback Method
tc	998.83	K	Joback Method
tf	349.05	K	Joback Method
vc	1.530	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1282.95	J/mol×K	815.84	Joback Method
cpg	1307.61	J/mol×K	846.34	Joback Method
cpg	1331.01	J/mol×K	876.84	Joback Method
cpg	1353.22	J/mol×K	907.34	Joback Method
cpg	1374.28	J/mol×K	937.84	Joback Method
cpg	1394.26	J/mol×K	968.33	Joback Method
cpg	1413.19	J/mol×K	998.83	Joback Method
dvisc	0.0037843	Pa×s	349.05	Joback Method

dvisc	0.0008041	Pa×s	426.85	Joback Method
dvisc	0.0002755	Pa×s	504.65	Joback Method
dvisc	0.0001256	Pa×s	582.44	Joback Method
dvisc	0.0000689	Pa×s	660.24	Joback Method
dvisc	0.0000429	Pa×s	738.04	Joback Method
dvisc	0.0000293	Pa×s	815.84	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=R505452&Units=SI

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