Tetracosane, 3,7,11,15,19-pentamethyl

Inchi: InChI=1S/C29H60/c1-8-10-11-16-26(4)19-13-20-28(6)23-15-24-29(7)22-14-21-27(5)18-1
InchiKey: QIJHTXDNXGBXLQ-UHFFFAOYSA-N
Formula: C29H60
SMILES: CCCCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CC
Mol. weight [g/mol]: 408.79

Physical Properties

Property code	Value	Unit	Source
gf	181.10	kJ/mol	Joback Method
hf	-668.29	kJ/mol	Joback Method
hfus	53.25	kJ/mol	Joback Method
hvap	78.21	kJ/mol	Joback Method
log10ws	-10.75		Crippen Method
logp	10.838		Crippen Method
mcvol	419.470	ml/mol	McGowan Method
pc	637.05	kPa	Joback Method
rinpol	2576.00		NIST Webbook
tb	860.72	K	Joback Method
tc	1054.25	K	Joback Method
tf	341.59	K	Joback Method
vc	1.629	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1416.53	J/mol×K	860.72	Joback Method
cpg	1442.34	J/mol×K	892.98	Joback Method
cpg	1466.72	J/mol×K	925.23	Joback Method
cpg	1489.75	J/mol×K	957.49	Joback Method
cpg	1511.50	J/mol×K	989.74	Joback Method
cpg	1532.03	J/mol×K	1022.00	Joback Method
cpg	1551.40	J/mol×K	1054.25	Joback Method
dvisc	0.0054428	Pa×s	341.59	Joback Method
dvisc	0.0008051	Pa×s	428.11	Joback Method

dvisc	0.0002264	Pa×s	514.63	Joback Method
dvisc	0.0000917	Pa×s	601.15	Joback Method
dvisc	0.0000467	Pa×s	687.68	Joback Method
dvisc	0.0000276	Pa×s	774.20	Joback Method
dvisc	0.0000181	Pa×s	860.72	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=R215619&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