2,6,10,14,18-Pentamethyl-7-(3-methyl-pentyl)-nona

Inchi: InChI=1S/C30H62/c1-10-26(6)20-22-30(29(9)19-12-15-25(4)5)23-21-28(8)18-13-17-27(7
InchiKey: ZYUQNRLZGGWDML-UHFFFAOYSA-N
Formula: C30H62
SMILES: CCC(C)CCC(CCC(C)CCCC(C)CCCC(C)C)C(C)CCCC(C)C
Mol. weight [g/mol]: 422.81

Physical Properties

Property code	Value	Unit	Source
gf	184.64	kJ/mol	Joback Method
hf	-699.49	kJ/mol	Joback Method
hfus	48.80	kJ/mol	Joback Method
hvap	79.66	kJ/mol	Joback Method
log10ws	-10.69		Crippen Method
logp	10.940		Crippen Method
mcvol	433.560	ml/mol	McGowan Method
pc	612.08	kPa	Joback Method
rinpol	2525.00		NIST Webbook
rinpol	2525.00		NIST Webbook
tb	882.72	K	Joback Method
tc	1081.45	K	Joback Method
tf	322.86	K	Joback Method
vc	1.673	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1484.45	J/mol×K	882.72	Joback Method
cpg	1601.40	J/mol×K	1048.33	Joback Method
cpg	1580.74	J/mol×K	1015.20	Joback Method
cpg	1558.79	J/mol×K	982.08	Joback Method
cpg	1535.47	J/mol×K	948.96	Joback Method
cpg	1510.72	J/mol×K	915.84	Joback Method
cpg	1620.84	J/mol×K	1081.45	Joback Method
dvisc	0.0000130	Pa×s	882.72	Joback Method

dvisc	0.0000205	Pa×s	789.41	Joback Method
dvisc	0.0000365	Pa×s	696.10	Joback Method
dvisc	0.0000777	Pa×s	602.79	Joback Method
dvisc	0.0002183	Pa×s	509.48	Joback Method
dvisc	0.0009747	Pa×s	416.17	Joback Method
dvisc	0.0103350	Pa×s	322.86	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R495919&Units=SI
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

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