Cyclopentene, 3-ethenyl-3-methyl-5-(1,5-dimethylhexyl)-4-(2,6,10

Inchi: InChI=1S/C30H56/c1-10-30(9)21-20-28(27(8)19-12-15-24(4)5)29(30)22-26(7)18-13-17-2

InchiKey: DWQLFMPKIWZFBD-UHFFFAOYSA-N

Formula: C30H56

SMILES: C=CC1(C)C=CC(C(C)CCCC(C)C)C1CC(C)CCCC(C)CCCC(C)C

Mol. weight [g/mol]: 416.77

Physical Properties

Property code	Value	Unit	Source
gf	322.96	kJ/mol	Joback Method
hf	-470.68	kJ/mol	Joback Method
hfus	45.56	kJ/mol	Joback Method
hvap	78.54	kJ/mol	Joback Method
log10ws	-10.05		Crippen Method
logp	10.102		Crippen Method
mcvol	414.100	ml/mol	McGowan Method
pc	684.93	kPa	Joback Method
rinpol	2425.00		NIST Webbook
tb	885.62	K	Joback Method
tc	1085.40	K	Joback Method
tf	378.18	K	Joback Method
vc	1.589	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1424.04	J/mol×K	885.62	Joback Method
cpg	1451.20	J/mol×K	918.92	Joback Method
cpg	1477.46	J/mol×K	952.21	Joback Method
cpg	1502.98	J/mol×K	985.51	Joback Method
cpg	1527.88	J/mol×K	1018.81	Joback Method
cpg	1552.33	J/mol×K	1052.11	Joback Method
cpg	1576.45	J/mol×K	1085.40	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R619071&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

Legend

cpg:	Ideal gas heat capacity
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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