1-Hexadecene, 2,7,11,15-tetramethyl

Inchi: InChI=1S/C20H40/c1-17(2)11-7-8-13-19(5)15-10-16-20(6)14-9-12-18(3)4/h18-20H,1,7-1
InchiKey: VJFPRYOKLIGMIR-UHFFFAOYSA-N
Formula: C20H40
SMILES: C=C(C)CCCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 280.53

Physical Properties

Property code	Value	Unit	Source
gf	189.49	kJ/mol	Joback Method
hf	-356.33	kJ/mol	Joback Method
hfus	34.40	kJ/mol	Joback Method
hvap	58.36	kJ/mol	Joback Method
log10ws	-7.32		Crippen Method
logp	7.392		Crippen Method
mcvol	288.360	ml/mol	McGowan Method
pc	1063.10	kPa	Joback Method
rinpol	1829.00		NIST Webbook
rinpol	1829.00		NIST Webbook
tb	652.24	K	Joback Method
tc	821.39	K	Joback Method
tf	254.44	K	Joback Method
vc	1.119	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	817.52	J/mol×K	652.24	Joback Method
cpg	839.02	J/mol×K	680.43	Joback Method
cpg	859.57	J/mol×K	708.62	Joback Method
cpg	879.20	J/mol×K	736.82	Joback Method
cpg	897.93	J/mol×K	765.01	Joback Method
cpg	915.82	J/mol×K	793.20	Joback Method
cpg	932.88	J/mol×K	821.39	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=R46922&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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