1-Tridecene, 2,4,6,8,10-pentamethyl, # 4

Inchi: InChI=1S/C18H36/c1-8-9-15(4)11-17(6)13-18(7)12-16(5)10-14(2)3/h15-18H,2,8-13H2,1,
InchiKey: ZTCIQBPVONMRJS-UHFFFAOYSA-N
Formula: C18H36
SMILES: C=C(C)CC(C)CC(C)CC(C)CC(C)CCC
Mol. weight [g/mol]: 252.48

Physical Properties

Property code	Value	Unit	Source
gf	170.21	kJ/mol	Joback Method
hf	-320.33	kJ/mol	Joback Method
hfus	25.69	kJ/mol	Joback Method
hvap	53.52	kJ/mol	Joback Method
log10ws	-6.24		Crippen Method
logp	6.467		Crippen Method
mcvol	260.180	ml/mol	McGowan Method
pc	1216.59	kPa	Joback Method
rinpol	1572.00		NIST Webbook
tb	606.04	K	Joback Method
tc	778.54	K	Joback Method
tf	216.90	K	Joback Method
vc	1.002	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	702.09	J/mol×K	606.04	Joback Method
cpg	723.34	J/mol×K	634.79	Joback Method
cpg	743.64	J/mol×K	663.54	Joback Method
cpg	763.03	J/mol×K	692.29	Joback Method
cpg	781.52	J/mol×K	721.04	Joback Method
cpg	799.17	J/mol×K	749.79	Joback Method
cpg	815.98	J/mol×K	778.54	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R568235&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