2,4,4,6,6,8,8-Heptamethyl-1-nonene

Inchi: InChI=1S/C16H32/c1-13(2)10-15(6,7)12-16(8,9)11-14(3,4)5/h1,10-12H2,2-9H3
InchiKey: UANJDEPRRZDYGA-UHFFFAOYSA-N
Formula: C16H32
SMILES: C=C(C)CC(C)(C)CC(C)(C)CC(C)(C)C
Mol. weight [g/mol]: 224.43
CAS: 15796-04-0

Physical Properties

Property code	Value	Unit	Source
gf	171.65	kJ/mol	Joback Method
hf	-284.18	kJ/mol	Joback Method
hfus	12.36	kJ/mol	Joback Method
hvap	46.73	kJ/mol	Joback Method
log10ws	-5.65		Crippen Method
logp	5.831		Crippen Method
mcvol	232.000	ml/mol	McGowan Method
pc	1423.99	kPa	Joback Method
rinpol	171.50		NIST Webbook
rinpol	171.50		NIST Webbook
tb	552.35	K	Joback Method
tc	742.45	K	Joback Method
tf	261.62	K	Joback Method
vc	0.880	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	597.92	J/mol×K	552.35	Joback Method
cpg	620.29	J/mol×K	584.03	Joback Method
cpg	641.33	J/mol×K	615.72	Joback Method
cpg	661.12	J/mol×K	647.40	Joback Method
cpg	679.74	J/mol×K	679.08	Joback Method
cpg	697.27	J/mol×K	710.76	Joback Method
cpg	713.79	J/mol×K	742.45	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=C15796040&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