1,16-Heptadiene, 2,4,6,8,10,12,14-octamethyl

Inchi: InChI=1S/C25H48/c1-18(2)11-20(5)13-22(7)15-24(9)17-25(10)16-23(8)14-21(6)12-19(3)4
InchiKey: XVXIZOUSLNITMZ-UHFFFAOYSA-N
Formula: C25H48
SMILES: C=C(C)CC(C)CC(C)CC(C)CC(C)CC(C)CC(C)CC(=C)C
Mol. weight [g/mol]: 348.65

Physical Properties

Property code	Value	Unit	Source
gf	303.56	kJ/mol	Joback Method
hf	-359.73	kJ/mol	Joback Method
hfus	34.19	kJ/mol	Joback Method
hvap	67.74	kJ/mol	Joback Method
log10ws	-8.54		Crippen Method
logp	8.686		Crippen Method
mcvol	354.510	ml/mol	McGowan Method
pc	827.64	kPa	Joback Method
rinpol	2049.00		NIST Webbook
tb	761.88	K	Joback Method
tc	942.74	K	Joback Method
tf	250.07	K	Joback Method
vc	1.363	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1099.79	J/mol×K	761.88	Joback Method
cpg	1123.07	J/mol×K	792.02	Joback Method
cpg	1145.18	J/mol×K	822.17	Joback Method
cpg	1166.19	J/mol×K	852.31	Joback Method
cpg	1186.13	J/mol×K	882.45	Joback Method
cpg	1205.06	J/mol×K	912.59	Joback Method
cpg	1223.05	J/mol×K	942.74	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=R568082&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