1-Undecene, 2,4,6,8,10-pentamethyl

Inchi: InChI=1S/C16H32/c1-12(2)8-14(5)10-16(7)11-15(6)9-13(3)4/h13-16H,1,8-11H2,2-7H3
InchiKey: FLWFTEQZLFRMQH-UHFFFAOYSA-N
Formula: C16H32
SMILES: C=C(C)CC(C)CC(C)CC(C)CC(C)C
Mol. weight [g/mol]: 224.43

Physical Properties

Property code	Value	Unit	Source
gf	153.37	kJ/mol	Joback Method
hf	-279.05	kJ/mol	Joback Method
hfus	20.51	kJ/mol	Joback Method
hvap	49.07	kJ/mol	Joback Method
log10ws	-5.41		Crippen Method
logp	5.687		Crippen Method
mcvol	232.000	ml/mol	McGowan Method
pc	1397.50	kPa	Joback Method
rinpol	1359.00		NIST Webbook
tb	560.28	K	Joback Method
tc	735.09	K	Joback Method
tf	194.36	K	Joback Method
vc	0.889	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	591.57	J/mol×K	560.28	Joback Method
cpg	612.12	J/mol×K	589.42	Joback Method
cpg	631.75	J/mol×K	618.55	Joback Method
cpg	650.50	J/mol×K	647.69	Joback Method
cpg	668.39	J/mol×K	676.82	Joback Method
cpg	685.46	J/mol×K	705.96	Joback Method
cpg	701.74	J/mol×K	735.09	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=R568240&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

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