1,7,10,13-Hexadecatetraene

Inchi: InChI=1S/C16H26/c1-3-5-7-9-11-13-15-16-14-12-10-8-6-4-2/h3,6,8,12-15H,1,4-5,7,9-11,
InchiKey: YKFPTPBZTVYMMC-POIBZBIISA-N
Formula: C16H26
SMILES: C=CCCCCC=CCC=CCC=CCC
Mol. weight [g/mol]: 218.38

Physical Properties

Property code	Value	Unit	Source
gf	412.34	kJ/mol	Joback Method
hf	103.52	kJ/mol	Joback Method
hfus	36.52	kJ/mol	Joback Method
hvap	50.41	kJ/mol	Joback Method
log10ws	-5.93		Crippen Method
logp	5.592		Crippen Method
mcvol	219.100	ml/mol	McGowan Method
pc	1530.66	kPa	Joback Method
rinpol	1561.00		NIST Webbook
ripol	1769.00		NIST Webbook
tb	574.64	K	Joback Method
tc	754.30	K	Joback Method
tf	253.08	K	Joback Method
vc	0.853	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	535.60	J/mol×K	574.64	Joback Method
cpg	553.42	J/mol×K	604.58	Joback Method
cpg	570.35	J/mol×K	634.53	Joback Method
cpg	586.42	J/mol×K	664.47	Joback Method
cpg	601.68	J/mol×K	694.42	Joback Method
cpg	616.21	J/mol×K	724.36	Joback Method
cpg	630.04	J/mol×K	754.30	Joback Method
dvisc	0.0040046	Pa×s	253.08	Joback Method

dvisc	0.0012548	Pa×s	306.67	Joback Method
dvisc	0.0005553	Pa×s	360.27	Joback Method
dvisc	0.0003035	Pa×s	413.86	Joback Method
dvisc	0.0001905	Pa×s	467.45	Joback Method
dvisc	0.0001316	Pa×s	521.05	Joback Method
dvisc	0.0000974	Pa×s	574.64	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R76292&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume