2-Pentadecene, 4,6,8,10,12-pentamethyl

Inchi: InChI=1S/C20H40/c1-8-10-16(3)12-18(5)14-20(7)15-19(6)13-17(4)11-9-2/h8,10,16-20H,9
InchiKey: CAAPGDRGDKZUIR-CSKARUKUSA-N
Formula: C20H40
SMILES: CC=CC(C)CC(C)CC(C)CC(C)CC(C)CCC
Mol. weight [g/mol]: 280.53

Physical Properties

Property code	Value	Unit	Source
gf	185.54	kJ/mol	Joback Method
hf	-365.31	kJ/mol	Joback Method
hfus	30.14	kJ/mol	Joback Method
hvap	58.13	kJ/mol	Joback Method
log10ws	-6.84		Crippen Method
logp	7.104		Crippen Method
mcvol	288.360	ml/mol	McGowan Method
pc	1077.81	kPa	Joback Method
rinpol	1658.00		NIST Webbook
rinpol	1658.00		NIST Webbook
tb	658.96	K	Joback Method
tc	833.74	K	Joback Method
tf	235.08	K	Joback Method
vc	1.105	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	821.66	J/mol×K	658.96	Joback Method
cpg	921.83	J/mol×K	804.61	Joback Method
cpg	903.68	J/mol×K	775.48	Joback Method
cpg	884.63	J/mol×K	746.35	Joback Method
cpg	864.64	J/mol×K	717.22	Joback Method
cpg	843.66	J/mol×K	688.09	Joback Method
cpg	939.12	J/mol×K	833.74	Joback Method
dvisc	0.0000576	Pa×s	658.96	Joback Method

dvisc	0.0000886	Pa×s	588.31	Joback Method
dvisc	0.0001531	Pa×s	517.67	Joback Method
dvisc	0.0003146	Pa×s	447.02	Joback Method
dvisc	0.0008472	Pa×s	376.37	Joback Method
dvisc	0.0036055	Pa×s	305.73	Joback Method
dvisc	0.0366447	Pa×s	235.08	Joback Method

Sources

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=R568344&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume