Heptadecane, 2,6,10,14-tetramethyl-

Other names: 2,6,10,14-Tetramethylheptadecane
Inchi: InChI=1S/C21H44/c1-7-11-19(4)14-9-15-21(6)17-10-16-20(5)13-8-12-18(2)3/h18-21H,7-
InchiKey: CIGFWENQAXVDOM-UHFFFAOYSA-N
Formula: C21H44
SMILES: CCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 296.57
CAS: 18344-37-1

Physical Properties

Property code	Value	Unit	Source
gf	116.18	kJ/mol	Joback Method
hf	-497.89	kJ/mol	Joback Method
hfus	36.05	kJ/mol	Joback Method
hvap	60.79	kJ/mol	Joback Method
log10ws	-7.65		Crippen Method
logp	7.862		Crippen Method
mcvol	306.750	ml/mol	McGowan Method
pc	975.34	kPa	Joback Method
rinpol	1890.00		NIST Webbook
rinpol	1872.00		NIST Webbook
rinpol	1894.00		NIST Webbook
rinpol	1897.00		NIST Webbook
rinpol	1872.00		NIST Webbook
rinpol	1872.00		NIST Webbook
rinpol	1895.00		NIST Webbook
rinpol	1870.00		NIST Webbook
rinpol	1870.00		NIST Webbook
rinpol	1893.00		NIST Webbook
rinpol	1872.00		NIST Webbook
rinpol	1872.00		NIST Webbook
rinpol	1895.00		NIST Webbook
rinpol	1872.00		NIST Webbook
rinpol	1867.00		NIST Webbook
rinpol	1872.00		NIST Webbook
rinpol	1867.00		NIST Webbook
tb	678.12	K	Joback Method
tc	846.24	K	Joback Method

tf	266.43	K	Joback Method
vc	1.188	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	902.12	J/mol×K	678.12	Joback Method
cpg	924.44	J/mol×K	706.14	Joback Method
cpg	945.77	J/mol×K	734.16	Joback Method
cpg	966.15	J/mol×K	762.18	Joback Method
cpg	985.59	J/mol×K	790.20	Joback Method
cpg	1004.15	J/mol×K	818.22	Joback Method
cpg	1021.83	J/mol×K	846.24	Joback Method
dvisc	0.0164078	Pa×s	266.43	Joback Method
dvisc	0.0025167	Pa×s	335.04	Joback Method
dvisc	0.0007301	Pa×s	403.66	Joback Method
dvisc	0.0003035	Pa×s	472.27	Joback Method
dvisc	0.0001576	Pa×s	540.89	Joback Method
dvisc	0.0000949	Pa×s	609.50	Joback Method
dvisc	0.0000633	Pa×s	678.12	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C18344371&Units=SI
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

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