Tetradecane, 2,6,10-trimethyl-

Other names: 2,6,10-Trimethyltetradecane
Inchi: InChI=1S/C17H36/c1-6-7-11-16(4)13-9-14-17(5)12-8-10-15(2)3/h15-17H,6-14H2,1-5H3
InchiKey: IMTCMWSWXFQQDL-UHFFFAOYSA-N
Formula: C17H36
SMILES: CCCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 240.47
CAS: 14905-56-7

Physical Properties

Property code	Value	Unit	Source
gf	84.94	kJ/mol	Joback Method
hf	-410.05	kJ/mol	Joback Method
hfus	29.22	kJ/mol	Joback Method
hvap	52.27	kJ/mol	Joback Method
log10ws	-6.21		Crippen Method
logp	6.445		Crippen Method
mcvol	250.390	ml/mol	McGowan Method
pc	1252.15	kPa	Joback Method
rinpol	1538.00		NIST Webbook
rinpol	1555.00		NIST Webbook
rinpol	1552.00		NIST Webbook
rinpol	1539.00		NIST Webbook
rinpol	1540.00		NIST Webbook
rinpol	1538.70		NIST Webbook
rinpol	1552.00		NIST Webbook
rinpol	1554.00		NIST Webbook
rinpol	1539.00		NIST Webbook
rinpol	1539.00		NIST Webbook
rinpol	1555.00		NIST Webbook
rinpol	1540.00		NIST Webbook
rinpol	1533.00		NIST Webbook
rinpol	1538.00		NIST Webbook
rinpol	1538.00		NIST Webbook
rinpol	1539.00		NIST Webbook
rinpol	1539.00		NIST Webbook
rinpol	1540.00		NIST Webbook
rinpol	1540.00		NIST Webbook

rinpol	1557.00		NIST Webbook
rinpol	1538.00		NIST Webbook
rinpol	1533.00		NIST Webbook
rinpol	1555.00		NIST Webbook
rinpol	1540.00		NIST Webbook
rinpol	1557.00		NIST Webbook
rinpol	1533.00		NIST Webbook
rinpol	1540.00		NIST Webbook
rinpol	1545.00		NIST Webbook
rinpol	1555.00		NIST Webbook
tb	587.04	K	Joback Method
tc	752.93	K	Joback Method
tf	236.35	K	Joback Method
vc	0.970	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	667.69	J/mol×K	587.04	Joback Method
cpg	688.36	J/mol×K	614.69	Joback Method
cpg	708.18	J/mol×K	642.34	Joback Method
cpg	727.16	J/mol×K	669.99	Joback Method
cpg	745.33	J/mol×K	697.63	Joback Method
cpg	762.72	J/mol×K	725.28	Joback Method
cpg	779.34	J/mol×K	752.93	Joback Method
dvisc	0.0187195	Pa×s	236.35	Joback Method
dvisc	0.0034253	Pa×s	294.80	Joback Method
dvisc	0.0010995	Pa×s	353.25	Joback Method
dvisc	0.0004873	Pa×s	411.69	Joback Method
dvisc	0.0002644	Pa×s	470.14	Joback Method
dvisc	0.0001642	Pa×s	528.59	Joback Method
dvisc	0.0001122	Pa×s	587.04	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=C14905567&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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