1-Hexadecanol, 3,7,11,15-tetramethyl-

Other names:	Dihydrophytol
	3,7,11,15-Tetramethylhexadecanol
	3,7,11,15-tetramethylhexadecan-1-ol
Inchi:	InChI=1S/C20H42O/c1-17(2)9-6-10-18(3)11-7-12-19(4)13-8-14-20(5)15-16-21/h17-21H,6
InchiKey:	AJAKLDUGVSKVDG-UHFFFAOYSA-N
Formula:	C20H42O
SMILES:	CC(C)CCCC(C)CCCC(C)CCCC(C)CCO
Mol. weight [g/mol]:	298.55
CAS:	645-72-7

Physical Properties

Property code	Value	Unit	Source
gf	-29.06	kJ/mol	Joback Method
hf	-629.48	kJ/mol	Joback Method
hfus	37.55	kJ/mol	Joback Method
hvap	75.24	kJ/mol	Joback Method
log10ws	-6.49		Crippen Method
logp	6.444		Crippen Method
mcvol	298.530	ml/mol	McGowan Method
pc	1100.81	kPa	Joback Method
tb	747.42	K	Joback Method
tc	919.72	K	Joback Method
tf	315.98	K	Joback Method
vc	1.151	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	928.66	J/mol×K	747.42	Joback Method
cpg	1017.77	J/mol×K	891.00	Joback Method
cpg	1001.66	J/mol×K	862.29	Joback Method
cpg	984.73	J/mol×K	833.57	Joback Method
cpg	966.94	J/mol×K	804.85	Joback Method
cpg	948.26	J/mol×K	776.14	Joback Method

cpg	1033.08	J/mol×K	919.72	Joback Method
dvisc	0.0000143	Pa×s	747.42	Joback Method
dvisc	0.0000254	Pa×s	675.51	Joback Method
dvisc	0.0000521	Pa×s	603.61	Joback Method
dvisc	0.0001295	Pa×s	531.70	Joback Method
dvisc	0.0004281	Pa×s	459.79	Joback Method
dvisc	0.0022041	Pa×s	387.89	Joback Method
dvisc	0.0239244	Pa×s	315.98	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=C645727&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume