1-Dodecanol, 3,7,11-trimethyl-

Other names: Hexa-hydro-farnesol
3,7,11-Trimethyl-1-dodecanol
Inchi: InChI=1S/C15H32O/c1-13(2)7-5-8-14(3)9-6-10-15(4)11-12-16/h13-16H,5-12H2,1-4H3
InchiKey: HDPUXESLSOZSIB-UHFFFAOYSA-N
Formula: C15H32O
SMILES: CC(C)CCCC(C)CCCC(C)CCO
Mol. weight [g/mol]: 228.41
CAS: 6750-34-1

Physical Properties

Property code	Value	Unit	Source
gf	-68.72	kJ/mol	Joback Method
hf	-521.00	kJ/mol	Joback Method
hfus	28.13	kJ/mol	Joback Method
hvap	64.50	kJ/mol	Joback Method
log10ws	-4.64		Crippen Method
logp	4.638		Crippen Method
mcvol	228.080	ml/mol	McGowan Method
pc	1547.57	kPa	Joback Method
rinpol	1576.00		NIST Webbook
rinpol	1563.00		NIST Webbook
rinpol	1571.00		NIST Webbook
tb	633.46	K	Joback Method
tc	797.99	K	Joback Method
tf	274.63	K	Joback Method
vc	0.876	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	638.08	J/mol×K	633.46	Joback Method
cpg	655.20	J/mol×K	660.88	Joback Method
cpg	671.58	J/mol×K	688.30	Joback Method
cpg	687.26	J/mol×K	715.72	Joback Method

cpg	702.26	J/mol×K	743.14	Joback Method
cpg	716.59	J/mol×K	770.56	Joback Method
cpg	730.28	J/mol×K	797.99	Joback Method
dvisc	0.0616129	Pa×s	274.63	Joback Method
dvisc	0.0060828	Pa×s	334.44	Joback Method
dvisc	0.0012123	Pa×s	394.24	Joback Method
dvisc	0.0003695	Pa×s	454.05	Joback Method
dvisc	0.0001485	Pa×s	513.85	Joback Method
dvisc	0.0000722	Pa×s	573.65	Joback Method
dvisc	0.0000402	Pa×s	633.46	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=C6750341&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