Z,Z-7,11-Hexadecadien-1-ol

Other names: (7Z,11Z)-hexadecandien-1-ol
Inchi: InChI=1S/C16H30O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17/h5-6,9-10,17H,2-4,7-8,
InchiKey: ZWMPSFHVSWYKPO-QPHGKBKNSA-N
Formula: C16H30O
SMILES: CCCCC=CCCC=CCCCCCCO
Mol. weight [g/mol]: 238.41

Physical Properties

Property code	Value	Unit	Source
gf	107.46	kJ/mol	Joback Method
hf	-291.36	kJ/mol	Joback Method
hfus	41.69	kJ/mol	Joback Method
hvap	67.81	kJ/mol	Joback Method
log10ws	-5.49		Crippen Method
logp	5.012		Crippen Method
mcvol	233.570	ml/mol	McGowan Method
pc	1528.27	kPa	Joback Method
rinpol	1857.00		NIST Webbook
rinpol	1857.00		NIST Webbook
tb	665.98	K	Joback Method
tc	833.90	K	Joback Method
tf	320.74	K	Joback Method
vc	0.910	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	649.91	J/mol×K	665.98	Joback Method
cpg	665.88	J/mol×K	693.97	Joback Method
cpg	681.15	J/mol×K	721.95	Joback Method
cpg	695.75	J/mol×K	749.94	Joback Method
cpg	709.70	J/mol×K	777.93	Joback Method
cpg	723.06	J/mol×K	805.91	Joback Method
cpg	735.86	J/mol×K	833.90	Joback Method

dvisc	0.0083725	Pa×s	320.74	Joback Method
dvisc	0.0016004	Pa×s	378.28	Joback Method
dvisc	0.0004736	Pa×s	435.82	Joback Method
dvisc	0.0001862	Pa×s	493.36	Joback Method
dvisc	0.0000889	Pa×s	550.90	Joback Method
dvisc	0.0000489	Pa×s	608.44	Joback Method
dvisc	0.0000298	Pa×s	665.98	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U131014&Units=SI

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