

7-hexadecenol, E

Other names:	(E)7-Hexadecen-1-ol
Inchi:	InChI=1S/C16H32O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17/h9-10,17H,2-8,11-16H2
InchiKey:	KKGMASVOOYPIGJ-MDZDMXLPSA-N
Formula:	C16H32O
SMILES:	CCCCCCCCC=CCCCCCO
Mol. weight [g/mol]:	240.42

Physical Properties

Property code	Value	Unit	Source
gf	27.24	kJ/mol	Joback Method
hf	-408.58	kJ/mol	Joback Method
hfus	41.49	kJ/mol	Joback Method
hvap	67.85	kJ/mol	Joback Method
log10ws	-5.64		Crippen Method
logp	5.236		Crippen Method
mvol	237.870	ml/mol	McGowan Method
pc	1467.98	kPa	Joback Method
ripol	1871.00		NIST Webbook
ripol	2413.00		NIST Webbook
tb	661.82	K	Joback Method
tc	825.49	K	Joback Method
tf	325.82	K	Joback Method
vc	0.930	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	671.38	J/molxK	661.82	Joback Method
cpg	746.95	J/molxK	798.21	Joback Method
cpg	733.13	J/molxK	770.94	Joback Method
cpg	718.68	J/molxK	743.66	Joback Method
cpg	703.60	J/molxK	716.38	Joback Method
cpg	687.84	J/molxK	689.10	Joback Method
cpg	760.19	J/molxK	825.49	Joback Method

dvisc	0.0000351	Paxs	661.82	Joback Method
dvisc	0.0000572	Paxs	605.82	Joback Method
dvisc	0.0001033	Paxs	549.82	Joback Method
dvisc	0.0002133	Paxs	493.82	Joback Method
dvisc	0.0005297	Paxs	437.82	Joback Method
dvisc	0.0017184	Paxs	381.82	Joback Method
dvisc	0.0083536	Paxs	325.82	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=R77995&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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