8-hexadecenol, Z

Other names: (Z)8-Hexadecen-1-ol
Inchi: InChI=1S/C16H32O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17/h8-9,17H,2-7,10-16H2,
InchiKey: CTDPGOSRCICGCA-HJWRWDBZSA-N
Formula: C16H32O
SMILES: CCCCCCCC=CCCCCCCCO
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
mcvol	237.870	ml/mol	McGowan Method
pc	1467.98	kPa	Joback Method
rinpol	1862.00		NIST Webbook
rinpol	1862.00		NIST Webbook
ripol	2411.00		NIST Webbook
ripol	2411.00		NIST Webbook
tb	661.82	K	Joback Method
tc	825.49	K	Joback Method
tf	325.82	K	Joback Method
vc	0.930	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	671.38	J/mol×K	661.82	Joback Method
cpg	687.84	J/mol×K	689.10	Joback Method
cpg	703.60	J/mol×K	716.38	Joback Method
cpg	718.68	J/mol×K	743.66	Joback Method
cpg	733.13	J/mol×K	770.94	Joback Method

cpg	746.95	J/mol×K	798.21	Joback Method
cpg	760.19	J/mol×K	825.49	Joback Method
dvisc	0.0083536	Pa×s	325.82	Joback Method
dvisc	0.0017184	Pa×s	381.82	Joback Method
dvisc	0.0005297	Pa×s	437.82	Joback Method
dvisc	0.0002133	Pa×s	493.82	Joback Method
dvisc	0.0001033	Pa×s	549.82	Joback Method
dvisc	0.0000572	Pa×s	605.82	Joback Method
dvisc	0.0000351	Pa×s	661.82	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R78474&Units=SI
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

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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