

Octadecane, 1-(ethenyloxy)-

Other names:	Ether, octadecyl vinyl Octadecyl vinyl ether Stearyl vinyl ether Vinyl stearyl ether Vinyl octadecyl ether 1-(Ethenyloxy)-octadecane 1-(vinyloxy)octadecane
Inchi:	InChI=1S/C20H40O/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-4-2/h4H,2-3,5
InchiKey:	QJJDJWUCRAPCOL-UHFFFAOYSA-N
Formula:	C20H40O
SMILES:	C=COCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]:	296.53
CAS:	930-02-9

Physical Properties

Property code	Value	Unit	Source
gf	100.36	kJ/mol	Joback Method
hf	-462.92	kJ/mol	Joback Method
hfus	47.46	kJ/mol	Joback Method
hvap	61.85	kJ/mol	Joback Method
log10ws	-7.63		Crippen Method
logp	7.408		Crippen Method
mcvol	294.230	ml/mol	McGowan Method
pc	1031.91	kPa	Joback Method
tb	676.10	K	Joback Method
tc	839.30	K	Joback Method
tf	335.63	K	Joback Method
vc	1.155	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	850.49	J/mol×K	676.10	Joback Method
cpg	943.44	J/mol×K	812.10	Joback Method

cpg	926.46	J/molxK	784.90	Joback Method
cpg	908.70	J/molxK	757.70	Joback Method
cpg	890.14	J/molxK	730.50	Joback Method
cpg	870.74	J/molxK	703.30	Joback Method
cpg	959.65	J/molxK	839.30	Joback Method
dvisc	0.0000787	Paxs	676.10	Joback Method
dvisc	0.0001067	Paxs	619.35	Joback Method
dvisc	0.0001540	Paxs	562.61	Joback Method
dvisc	0.0002412	Paxs	505.86	Joback Method
dvisc	0.0004232	Paxs	449.12	Joback Method
dvisc	0.0008735	Paxs	392.38	Joback Method
dvisc	0.0023035	Paxs	335.63	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=C930029&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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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