Z,E-2,13-Octadecadien-1-ol

Other names: (Z,E)-2,13-octadecadienol
(Z)-2-(E)-13-Octadecadien-1-ol
Inchi: InChI=1S/C18H34O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19/h5-6,16-17,19H,
InchiKey: YCOMGIOWVNOOBC-YZDAJDCNSA-N
Formula: C18H34O
SMILES: CCCCC=CCCCCCCCCCC=CCO
Mol. weight [g/mol]: 266.46

Physical Properties

Property code	Value	Unit	Source
gf	124.30	kJ/mol	Joback Method
hf	-332.64	kJ/mol	Joback Method
hfus	46.87	kJ/mol	Joback Method
hvap	72.26	kJ/mol	Joback Method
log10ws	-6.33		Crippen Method
logp	5.792		Crippen Method
mcvol	261.750	ml/mol	McGowan Method
pc	1322.31	kPa	Joback Method
rinpol	2076.00		NIST Webbook
rinpol	2076.00		NIST Webbook
rinpol	2076.00		NIST Webbook
ripol	2186.00		NIST Webbook
ripol	2186.00		NIST Webbook
tb	711.74	K	Joback Method
tc	881.52	K	Joback Method
tf	343.28	K	Joback Method
vc	1.022	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	762.54	J/mol×K	711.74	Joback Method
cpg	779.51	J/mol×K	740.04	Joback Method
cpg	795.72	J/mol×K	768.33	Joback Method

cpg	811.22	J/mol×K	796.63	Joback Method
cpg	826.06	J/mol×K	824.93	Joback Method
cpg	840.26	J/mol×K	853.23	Joback Method
cpg	853.88	J/mol×K	881.52	Joback Method
dvisc	0.0053256	Pa×s	343.28	Joback Method
dvisc	0.0010481	Pa×s	404.69	Joback Method
dvisc	0.0003165	Pa×s	466.10	Joback Method
dvisc	0.0001263	Pa×s	527.51	Joback Method
dvisc	0.0000611	Pa×s	588.92	Joback Method
dvisc	0.0000339	Pa×s	650.33	Joback Method
dvisc	0.0000208	Pa×s	711.74	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U131103&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

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