8,10-Dodecadien-1-ol

Other names:	(8E,10E)-dodeca-8,10-dien-1-ol
	(E,E)-8,10-dodecadien-1-ol
	8,10-Dodecadienol
	codlemone
	dodeca-8,10-dienol
	trans-trans-8,10-dodecadien-1-ol
Inchi:	InChI=1S/C12H22O/c1-2-3-4-5-6-7-8-9-10-11-12-13/h2-5,13H,6-12H2,1H3/b3-2+,5-4+
InchiKey:	CSWBSLXBXRFNST-MQQKCMAXSA-N
Formula:	C12H22O
SMILES:	CC=CC=CCCCCCCCO
Mol. weight [g/mol]:	182.30
CAS:	57002-06-9

Physical Properties

Property code	Value	Unit	Source
gf	73.78	kJ/mol	Joback Method
hf	-208.80	kJ/mol	Joback Method
hfus	31.33	kJ/mol	Joback Method
hvap	58.90	kJ/mol	Joback Method
log10ws	-3.82		Crippen Method
logp	3.452		Crippen Method
mcvol	177.210	ml/mol	McGowan Method
pc	2115.83	kPa	Joback Method
rinpol	1475.00		NIST Webbook
rinpol	1475.00		NIST Webbook
tb	574.46	K	Joback Method
tc	743.60	K	Joback Method
tf	275.66	K	Joback Method
vc	0.686	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	440.36	J/mol×K	574.46	Joback Method

cpg	454.17	J/mol×K	602.65	Joback Method
cpg	467.34	J/mol×K	630.84	Joback Method
cpg	479.91	J/mol×K	659.03	Joback Method
cpg	491.91	J/mol×K	687.22	Joback Method
cpg	503.37	J/mol×K	715.41	Joback Method
cpg	514.31	J/mol×K	743.60	Joback Method
dvisc	0.0214404	Pa×s	275.66	Joback Method
dvisc	0.0038100	Pa×s	325.46	Joback Method
dvisc	0.0010709	Pa×s	375.26	Joback Method
dvisc	0.0004053	Pa×s	425.06	Joback Method
dvisc	0.0001880	Pa×s	474.86	Joback Method
dvisc	0.0001009	Pa×s	524.66	Joback Method
dvisc	0.0000604	Pa×s	574.46	Joback Method
hvapt	92.30	kJ/mol	298.15	Vapor pressures and vaporization enthalpy of codlemone by correlation gas chromatography

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C57002069&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Vapor pressures and vaporization enthalpy of codlemone by correlation gas chromatography:	https://www.doi.org/10.1016/j.jct.2015.06.002
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
hvapt:	Enthalpy of vaporization at a given temperature
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