1,3-Octadiene (e & z)

Inchi: InChI=1S/2C8H14/c2*1-3-5-7-8-6-4-2/h2*3,5,7H,1,4,6,8H2,2H3/b7-5+;7-5-
InchiKey: AHXYUFDHOFVJLM-QUMALBNYSA-N
Formula: C16H28
SMILES: C=CC=CCCCC.C=CC=CCCCC
Mol. weight [g/mol]: 220.39

Physical Properties

Property code	Value	Unit	Source
gf	315.20	kJ/mol	Joback Method
hf	0.11	kJ/mol	Joback Method
hfus	31.68	kJ/mol	Joback Method
hvap	50.08	kJ/mol	Joback Method
log10ws	-6.04		Crippen Method
logp	5.838		Crippen Method
mcvol	229.960	ml/mol	McGowan Method
pc	1419.71	kPa	Joback Method
tb	568.56	K	Joback Method
tc	749.31	K	Joback Method
tf	223.66	K	Joback Method
vc	0.872	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	552.24	J/mol×K	568.56	Joback Method
cpg	572.07	J/mol×K	598.69	Joback Method
cpg	591.02	J/mol×K	628.81	Joback Method
cpg	609.12	J/mol×K	658.94	Joback Method
cpg	626.38	J/mol×K	689.06	Joback Method
cpg	642.80	J/mol×K	719.19	Joback Method
cpg	658.42	J/mol×K	749.31	Joback Method
dvisc	0.0279076	Pa×s	223.66	Joback Method
dvisc	0.0027186	Pa×s	281.14	Joback Method
dvisc	0.0005839	Pa×s	338.63	Joback Method

dvisc	0.0001960	Pa×s	396.11	Joback Method
dvisc	0.0000868	Pa×s	453.59	Joback Method
dvisc	0.0000461	Pa×s	511.08	Joback Method
dvisc	0.0000279	Pa×s	568.56	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=B6009789&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume