7-Octenylcyclopentane

Inchi: InChI=1S/C13H24/c1-2-3-4-5-6-7-10-13-11-8-9-12-13/h2,13H,1,3-12H2
InchiKey: VXXAPQAFRHIOBP-UHFFFAOYSA-N
Formula: C13H24
SMILES: C=CCCCCCCC1CCCC1
Mol. weight [g/mol]: 180.33

Physical Properties

Property code	Value	Unit	Source
gf	182.97	kJ/mol	Joback Method
hf	-125.74	kJ/mol	Joback Method
hfus	22.08	kJ/mol	Joback Method
hvap	44.12	kJ/mol	Joback Method
log10ws	-4.77		Crippen Method
logp	4.703		Crippen Method
mcvol	178.870	ml/mol	McGowan Method
pc	1985.89	kPa	Joback Method
rinpol	1327.00		NIST Webbook
tb	508.80	K	Joback Method
tc	695.91	K	Joback Method
tf	245.41	K	Joback Method
vc	0.685	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	425.30	J/mol×K	508.80	Joback Method
cpg	515.79	J/mol×K	664.72	Joback Method
cpg	499.52	J/mol×K	633.54	Joback Method
cpg	482.38	J/mol×K	602.35	Joback Method
cpg	464.32	J/mol×K	571.17	Joback Method
cpg	445.31	J/mol×K	539.98	Joback Method
cpg	531.21	J/mol×K	695.91	Joback Method
dvisc	0.0002718	Pa×s	508.80	Joback Method
dvisc	0.0003512	Pa×s	464.90	Joback Method

dvisc	0.0004786	Pa×s	421.00	Joback Method
dvisc	0.0007010	Pa×s	377.11	Joback Method
dvisc	0.0011353	Pa×s	333.21	Joback Method
dvisc	0.0021286	Pa×s	289.31	Joback Method
dvisc	0.0049972	Pa×s	245.41	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R388960&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume