1-Cyclopentylcyclopentene

Inchi: InChI=1S/C10H16/c1-2-6-9(5-1)10-7-3-4-8-10/h5,10H,1-4,6-8H2
InchiKey: UJZQAOVZOCQFOO-UHFFFAOYSA-N
Formula: C10H16
SMILES: C1=C(C2CCCC2)CCC1
Mol. weight [g/mol]: 136.23
CAS: 4884-21-3

Physical Properties

Property code	Value	Unit	Source
gf	134.46	kJ/mol	Joback Method
hf	-62.12	kJ/mol	Joback Method
hfus	9.29	kJ/mol	Joback Method
hvap	39.63	kJ/mol	Joback Method
log10ws	-3.41		Crippen Method
logp	3.287		Crippen Method
mcvol	125.740	ml/mol	McGowan Method
pc	3213.68	kPa	Joback Method
tb	464.35 ± 0.50	K	NIST Webbook
tc	693.65	K	Joback Method
tf	191.85 ± 0.60	K	NIST Webbook
vc	0.465	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	272.24	J/mol×K	467.57	Joback Method
cpg	360.88	J/mol×K	655.97	Joback Method
cpg	345.49	J/mol×K	618.29	Joback Method
cpg	329.00	J/mol×K	580.61	Joback Method
cpg	311.33	J/mol×K	542.93	Joback Method
cpg	292.43	J/mol×K	505.25	Joback Method
cpg	375.22	J/mol×K	693.65	Joback Method
dvisc	0.0003705	Pa×s	467.57	Joback Method
dvisc	0.0004616	Pa×s	429.94	Joback Method

dvisc	0.0005999	Pa×s	392.31	Joback Method
dvisc	0.0008242	Pa×s	354.68	Joback Method
dvisc	0.0012211	Pa×s	317.04	Joback Method
dvisc	0.0020111	Pa×s	279.41	Joback Method
dvisc	0.0038687	Pa×s	241.78	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=C4884213&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
mcvol: McGowan's characteristic volume
pc: Critical Pressure
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume