4-propylcyclopentene

Inchi: InChI=1S/C8H14/c1-2-5-8-6-3-4-7-8/h3-4,8H,2,5-7H2,1H3
InchiKey: CUADAVWSZMYUFJ-UHFFFAOYSA-N
Formula: C8H14
SMILES: CCCC1CC=CC1
Mol. weight [g/mol]: 110.20
CAS: 66577-47-7

Physical Properties

Property code	Value	Unit	Source
af	0.2688		Cheméo Relay (1.0)
gf	82.99	kJ/mol	Joback Method
hf	-49.31	kJ/mol	Cheméo Relay (1.0)
hfus	11.63	kJ/mol	Joback Method
hvap	39.14	kJ/mol	Cheméo Relay (1.0)
ie	8.87	eV	Cheméo Relay (1.0)
log10ws	-4.12		Cheméo Relay (1.0)
logp	2.753		Crippen Method
mcvol	108.420	ml/mol	McGowan Method
pc	3191.93	kPa	Joback Method
tb	397.90	K	Cheméo Relay (1.0)
tc	569.79	K	Cheméo Relay (1.0)
tf	178.12	K	Cheméo Relay (1.0)
vc	0.389	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	201.22	J/mol×K	396.88	Joback Method
cpg	216.48	J/mol×K	429.33	Joback Method
cpg	230.98	J/mol×K	461.78	Joback Method
cpg	244.74	J/mol×K	494.23	Joback Method
cpg	257.80	J/mol×K	526.68	Joback Method
cpg	270.17	J/mol×K	559.13	Joback Method
cpg	281.88	J/mol×K	591.58	Joback Method

dvisc	0.0030941	Pa×s	191.58	Joback Method
dvisc	0.0015439	Pa×s	225.80	Joback Method
dvisc	0.0009251	Pa×s	260.01	Joback Method
dvisc	0.0006244	Pa×s	294.23	Joback Method
dvisc	0.0004574	Pa×s	328.45	Joback Method
dvisc	0.0003554	Pa×s	362.66	Joback Method
dvisc	0.0002884	Pa×s	396.88	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C66577477&Units=SI
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

af:	Acentric Factor
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
ie:	Ionization energy
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

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