1,3-Cyclopentadiene, 5-propyl

Inchi: InChI=1S/C8H12/c1-2-5-8-6-3-4-7-8/h3-4,6-8H,2,5H2,1H3
InchiKey: RTBGKGTVXBTGDN-UHFFFAOYSA-N
Formula: C8H12
SMILES: CCCC1C=CC=C1
Mol. weight [g/mol]: 108.18

Physical Properties

Property code	Value	Unit	Source
gf	112.95	kJ/mol	Joback Method
hf	-32.41	kJ/mol	Joback Method
hfus	12.85	kJ/mol	Joback Method
hvap	34.24	kJ/mol	Joback Method
log10ws	-2.53		Crippen Method
logp	2.529		Crippen Method
mcvol	104.120	ml/mol	McGowan Method
pc	3325.84	kPa	Joback Method
rinpol	835.00		NIST Webbook
ripol	1046.60		NIST Webbook
ripol	1046.60		NIST Webbook
tb	396.04	K	Joback Method
tc	592.77	K	Joback Method
tf	192.34	K	Joback Method
vc	0.397	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	188.67	J/mol×K	396.04	Joback Method
cpg	202.69	J/mol×K	428.83	Joback Method
cpg	215.96	J/mol×K	461.62	Joback Method
cpg	228.52	J/mol×K	494.40	Joback Method
cpg	240.41	J/mol×K	527.19	Joback Method
cpg	251.63	J/mol×K	559.98	Joback Method
cpg	262.23	J/mol×K	592.77	Joback Method

dvisc	0.0021969	Pa×s	192.34	Joback Method
dvisc	0.0011927	Pa×s	226.29	Joback Method
dvisc	0.0007594	Pa×s	260.24	Joback Method
dvisc	0.0005366	Pa×s	294.19	Joback Method
dvisc	0.0004074	Pa×s	328.14	Joback Method
dvisc	0.0003257	Pa×s	362.09	Joback Method
dvisc	0.0002706	Pa×s	396.04	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=R40952&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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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