

1,3-Cyclopentadiene, 1-heptyl

Inchi:	InChI=1S/C12H20/c1-2-3-4-5-6-9-12-10-7-8-11-12/h7-8,10H,2-6,9,11H2,1H3
InchiKey:	HYWIHNGPLDEBNO-UHFFFAOYSA-N
Formula:	C12H20
SMILES:	CCCCCCC1=CC=CC1
Mol. weight [g/mol]:	164.29

Physical Properties

Property code	Value	Unit	Source
gf	144.71	kJ/mol	Joback Method
hf	-106.10	kJ/mol	Joback Method
hfus	21.75	kJ/mol	Joback Method
hvap	44.12	kJ/mol	Joback Method
log10ws	-4.45		Crippen Method
logp	4.233		Crippen Method
mvol	160.480	ml/mol	McGowan Method
pc	2267.57	kPa	Joback Method
rinpol	1210.00		NIST Webbook
ripol	1409.50		NIST Webbook
tb	497.21	K	Joback Method
tc	687.60	K	Joback Method
tf	254.18	K	Joback Method
vc	0.622	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	362.16	J/molxK	497.21	Joback Method
cpg	379.20	J/molxK	528.94	Joback Method
cpg	395.37	J/molxK	560.67	Joback Method
cpg	410.71	J/molxK	592.41	Joback Method
cpg	425.25	J/molxK	624.14	Joback Method
cpg	439.04	J/molxK	655.87	Joback Method
cpg	452.10	J/molxK	687.60	Joback Method
dvisc	0.0034483	Paxs	254.18	Joback Method

dvisc	0.0016562	Paxs	294.69	Joback Method
dvisc	0.0009497	Paxs	335.19	Joback Method
dvisc	0.0006140	Paxs	375.70	Joback Method
dvisc	0.0004321	Paxs	416.20	Joback Method
dvisc	0.0003236	Paxs	456.71	Joback Method
dvisc	0.0002541	Paxs	497.21	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=R40724&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
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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