

4-Pentenylcyclopentane

Inchi:	InChI=1S/C10H18/c1-2-3-4-7-10-8-5-6-9-10/h2,10H,1,3-9H2
InchiKey:	IRNRMIXNPUTRHT-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	C=CCCCC1CCCC1
Mol. weight [g/mol]:	138.25

Physical Properties

Property code	Value	Unit	Source
gf	157.71	kJ/mol	Joback Method
hf	-63.82	kJ/mol	Joback Method
hfus	14.31	kJ/mol	Joback Method
hvap	37.44	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.533		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2613.74	kPa	Joback Method
rinpola	1026.40		NIST Webbook
tb	440.16	K	Joback Method
tc	633.57	K	Joback Method
tf	211.60	K	Joback Method
vc	0.517	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	283.46	J/molxK	440.16	Joback Method
cpg	364.40	J/molxK	601.34	Joback Method
cpg	349.90	J/molxK	569.10	Joback Method
cpg	334.58	J/molxK	536.87	Joback Method
cpg	318.43	J/molxK	504.63	Joback Method
cpg	301.40	J/molxK	472.40	Joback Method
cpg	378.13	J/molxK	633.57	Joback Method
dvisc	0.0003042	Paxs	440.16	Joback Method
dvisc	0.0003853	Paxs	402.07	Joback Method

dvisc	0.0005127	Paxs	363.97	Joback Method
dvisc	0.0007294	Paxs	325.88	Joback Method
dvisc	0.0011393	Paxs	287.79	Joback Method
dvisc	0.0020388	Paxs	249.69	Joback Method
dvisc	0.0044990	Paxs	211.60	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R388940&Units=SI
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

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

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