

5-Cyclohexyl-1-pentene

Other names:	Cyclohexane, 4-pentenyl 4-Pentenylcyclohexane
Inchi:	InChI=1S/C11H20/c1-2-3-5-8-11-9-6-4-7-10-11/h2,11H,1,3-10H2
InchiKey:	CYCUXCSZQIHKAU-UHFFFAOYSA-N
Formula:	C11H20
SMILES:	C=CCCCC1CCCCC1
Mol. weight [g/mol]:	152.28
CAS:	5729-54-4

Physical Properties

Property code	Value	Unit	Source
gf	154.03	kJ/mol	Joback Method
hf	-90.62	kJ/mol	Joback Method
hfus	14.80	kJ/mol	Joback Method
hvap	39.84	kJ/mol	Joback Method
log10ws	-3.93		Crippen Method
logp	3.923		Crippen Method
mcvol	150.690	ml/mol	McGowan Method
pc	2433.84	kPa	Joback Method
tb	467.31	K	Joback Method
tc	666.05	K	Joback Method
tf	219.35	K	Joback Method
vc	0.566	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	328.92	J/mol×K	467.31	Joback Method
cpg	348.71	J/mol×K	500.43	Joback Method
cpg	367.49	J/mol×K	533.56	Joback Method
cpg	385.30	J/mol×K	566.68	Joback Method
cpg	402.16	J/mol×K	599.80	Joback Method
cpg	418.12	J/mol×K	632.93	Joback Method
cpg	433.20	J/mol×K	666.05	Joback Method

dvisc	0.0075473	Paxs	219.35	Joback Method
dvisc	0.0027332	Paxs	260.68	Joback Method
dvisc	0.0013071	Paxs	302.00	Joback Method
dvisc	0.0007465	Paxs	343.33	Joback Method
dvisc	0.0004809	Paxs	384.66	Joback Method
dvisc	0.0003374	Paxs	425.98	Joback Method
dvisc	0.0002520	Paxs	467.31	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=C5729544&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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