Cyclohexene,1-hexyl-

Other names: 1-hexyl-1-cyclohexene
Inchi: InChI=1S/C12H22/c1-2-3-4-6-9-12-10-7-5-8-11-12/h10H,2-9,11H2,1H3
InchiKey: NEFDOOJYBCQHHV-UHFFFAOYSA-N
Formula: C12H22
SMILES: CCCCCCC1=CCCCC1
Mol. weight [g/mol]: 166.30
CAS: 3964-66-7

Physical Properties

Property code	Value	Unit	Source
gf	102.65	kJ/mol	Joback Method
hf	-170.04	kJ/mol	Joback Method
hfus	18.43	kJ/mol	Joback Method
hvap	44.00	kJ/mol	Joback Method
ie	8.37 ± 0.03	eV	NIST Webbook
log10ws	-4.59		Crippen Method
logp	4.457		Crippen Method
mcvol	164.780	ml/mol	McGowan Method
pc	2244.00	kPa	Joback Method
rinpol	1242.00		NIST Webbook
rinpol	1244.00		NIST Webbook
rinpol	1243.00		NIST Webbook
rinpol	1243.00		NIST Webbook
ripol	1395.00		NIST Webbook
ripol	1414.00		NIST Webbook
ripol	1419.00		NIST Webbook
ripol	1373.00		NIST Webbook
ripol	1379.00		NIST Webbook
ripol	1384.00		NIST Webbook
ripol	1389.00		NIST Webbook
ripol	1403.00		NIST Webbook
ripol	1399.00		NIST Webbook
ripol	1404.00		NIST Webbook
ripol	1373.00		NIST Webbook
ripol	1378.60		NIST Webbook
ripol	1384.20		NIST Webbook
ripol	1389.10		NIST Webbook

ripol	1394.60		NIST Webbook
ripol	1399.20		NIST Webbook
ripol	1404.30		NIST Webbook
ripol	1388.00		NIST Webbook
ripol	1399.00		NIST Webbook
ripol	1388.00		NIST Webbook
ripol	1354.60		NIST Webbook
ripol	1350.00		NIST Webbook
ripol	1342.40		NIST Webbook
tb	493.00 ± 5.00	K	NIST Webbook
tc	697.83	K	Joback Method
tf	249.90	K	Joback Method
vc	0.627	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	379.55	J/mol×K	502.32	Joback Method
cpg	465.80	J/mol×K	665.24	Joback Method
cpg	450.33	J/mol×K	632.66	Joback Method
cpg	433.99	J/mol×K	600.07	Joback Method
cpg	416.77	J/mol×K	567.49	Joback Method
cpg	398.64	J/mol×K	534.90	Joback Method
cpg	480.45	J/mol×K	697.83	Joback Method
dvisc	0.0002099	Pa×s	502.32	Joback Method
dvisc	0.0002842	Pa×s	460.25	Joback Method
dvisc	0.0004090	Pa×s	418.18	Joback Method
dvisc	0.0006385	Pa×s	376.11	Joback Method
dvisc	0.0011151	Pa×s	334.04	Joback Method
dvisc	0.0022871	Pa×s	291.97	Joback Method
dvisc	0.0059743	Pa×s	249.90	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=C3964667&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ie:	Ionization energy
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