Cyclohexene, 1-octyl-

Other names: 1-Octyl-1-cyclohexene
Inchi: InChI=1S/C14H26/c1-2-3-4-5-6-8-11-14-12-9-7-10-13-14/h12H,2-11,13H2,1H3
InchiKey: AHNZGLABLPCXKB-UHFFFAOYSA-N
Formula: C14H26
SMILES: CCCCCCCCC1=CCCCC1
Mol. weight [g/mol]: 194.36
CAS: 15232-87-8

Physical Properties

Property code	Value	Unit	Source
gf	119.49	kJ/mol	Joback Method
hf	-211.32	kJ/mol	Joback Method
hfus	23.61	kJ/mol	Joback Method
hvap	48.45	kJ/mol	Joback Method
log10ws	-5.43		Crippen Method
logp	5.237		Crippen Method
mcvol	192.960	ml/mol	McGowan Method
pc	1885.44	kPa	Joback Method
ripol	1567.00		NIST Webbook
ripol	1583.00		NIST Webbook
ripol	1595.00		NIST Webbook
ripol	1600.00		NIST Webbook
ripol	1612.00		NIST Webbook
ripol	1617.00		NIST Webbook
ripol	1583.00		NIST Webbook
ripol	1580.00		NIST Webbook
ripol	1586.00		NIST Webbook
ripol	1592.00		NIST Webbook
ripol	1598.00		NIST Webbook
ripol	1603.00		NIST Webbook
ripol	1580.50		NIST Webbook
ripol	1586.30		NIST Webbook
ripol	1592.00		NIST Webbook
ripol	1598.10		NIST Webbook
ripol	1602.80		NIST Webbook
tb	548.08	K	Joback Method
tc	738.70	K	Joback Method

tf	220.70 ± 3.00	K	NIST Webbook
vc	0.740	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	479.64	J/mol×K	548.08	Joback Method
cpg	570.94	J/mol×K	706.93	Joback Method
cpg	554.54	J/mol×K	675.16	Joback Method
cpg	537.24	J/mol×K	643.39	Joback Method
cpg	519.02	J/mol×K	611.62	Joback Method
cpg	499.83	J/mol×K	579.85	Joback Method
cpg	586.47	J/mol×K	738.70	Joback Method
dvisc	0.0001761	Pa×s	548.08	Joback Method
dvisc	0.0002400	Pa×s	502.14	Joback Method
dvisc	0.0003481	Pa×s	456.20	Joback Method
dvisc	0.0005486	Pa×s	410.26	Joback Method
dvisc	0.0009698	Pa×s	364.32	Joback Method
dvisc	0.0020208	Pa×s	318.38	Joback Method
dvisc	0.0053938	Pa×s	272.44	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C15232878&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume