Hexane, 1,6-dicyclohexyl-

Other names: Cyclohexane, 1,1'-(1,6-hexanediyl)bis-
Inchi: InChI=1S/C18H34/c1(5-11-17-13-7-3-8-14-17)2-6-12-18-15-9-4-10-16-18/h17-18H,1-16H
InchiKey: VBQJFJRTZSWYPK-UHFFFAOYSA-N
Formula: C18H34
SMILES: C(CCCC1CCCCC1)CCC1CCCCC1
Mol. weight [g/mol]: 250.46
CAS: 1610-23-7

Physical Properties

Property code	Value	Unit	Source
chs	-11560.00	kJ/mol	NIST Webbook
gf	149.58	kJ/mol	Joback Method
hf	-306.21	kJ/mol	Joback Method
hfus	26.05	kJ/mol	Joback Method
hvap	56.52	kJ/mol	Joback Method
log10ws	-6.66		Crippen Method
logp	6.488		Crippen Method
mcvol	242.760	ml/mol	McGowan Method
pc	1554.90	kPa	Joback Method
tb	613.70 ± 0.60	K	NIST Webbook
tc	859.18	K	Joback Method
tf	280.10 ± 2.00	K	NIST Webbook
tf	283.36 ± 0.30	K	NIST Webbook
tf	283.36 ± 1.00	K	NIST Webbook
vc	0.909	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	717.20	J/mol×K	650.34	Joback Method
cpg	743.76	J/mol×K	685.15	Joback Method
cpg	768.72	J/mol×K	719.95	Joback Method
cpg	792.13	J/mol×K	754.76	Joback Method
cpg	814.06	J/mol×K	789.57	Joback Method

cpg	834.55	J/mol×K	824.38	Joback Method
cpg	853.67	J/mol×K	859.18	Joback Method
dvisc	0.0066166	Pa×s	307.38	Joback Method
dvisc	0.0020956	Pa×s	364.54	Joback Method
dvisc	0.0009065	Pa×s	421.70	Joback Method
dvisc	0.0004789	Pa×s	478.86	Joback Method
dvisc	0.0002899	Pa×s	536.02	Joback Method
dvisc	0.0001933	Pa×s	593.18	Joback Method
dvisc	0.0001385	Pa×s	650.34	Joback Method
hvapt	85.90	kJ/mol	330.50	NIST Webbook

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=C1610237&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

chs: Standard solid enthalpy of combustion
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
hvapt: Enthalpy of vaporization at a given temperature
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