1,1'-Bicycloheptyl

Other names:	Bicycloheptyl
	Cycloheptylcycloheptane
Inchi:	InChI=1S/C14H26/c1-2-6-10-13(9-5-1)14-11-7-3-4-8-12-14/h13-14H,1-12H2
InchiKey:	ARUKYTASOALXFG-UHFFFAOYSA-N
Formula:	C14H26
SMILES:	C1CCCC(C2CCCCCC2)CC1
Mol. weight [g/mol]:	194.36
CAS:	23183-11-1

Physical Properties

Property code	Value	Unit	Source
chl	-8940.00 ± 2.50	kJ/mol	NIST Webbook
chl	-8942.00 ± 3.00	kJ/mol	NIST Webbook
gf	91.70	kJ/mol	Joback Method
hf	-235.97	kJ/mol	Joback Method
hfus	11.49	kJ/mol	Joback Method
hvap	47.96	kJ/mol	Joback Method
log10ws	-4.99		Crippen Method
logp	4.927		Crippen Method
mcvol	186.400	ml/mol	McGowan Method
pc	2263.26	kPa	Joback Method
tb	567.36	K	Joback Method
tc	807.64	K	Joback Method
tf	255.26	K	Joback Method
vc	0.669	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	494.31	J/mol×K	567.36	Joback Method
cpg	523.52	J/mol×K	607.41	Joback Method
cpg	550.83	J/mol×K	647.45	Joback Method
cpg	576.25	J/mol×K	687.50	Joback Method
cpg	599.85	J/mol×K	727.54	Joback Method

cpg	621.67	J/mol×K	767.59	Joback Method
cpg	641.74	J/mol×K	807.64	Joback Method
dvisc	0.0186792	Pa×s	255.26	Joback Method
dvisc	0.0040531	Pa×s	307.28	Joback Method
dvisc	0.0013688	Pa×s	359.29	Joback Method
dvisc	0.0006083	Pa×s	411.31	Joback Method
dvisc	0.0003244	Pa×s	463.33	Joback Method
dvisc	0.0001964	Pa×s	515.34	Joback Method
dvisc	0.0001303	Pa×s	567.36	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C23183111&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

chl:	Standard liquid 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
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