

1,1'-Bicyclooctyl

Other names:	Bicyclooctyl
Inchi:	InChI=1S/C16H30/c1-3-7-11-15(12-8-4-1)16-13-9-5-2-6-10-14-16/h15-16H,1-14H2
InchiKey:	NLUNLVTVUDIHFE-UHFFFAOYSA-N
Formula:	C16H30
SMILES:	C1CCCC(C2CCCCCCC2)CCC1
Mol. weight [g/mol]:	222.41
CAS:	6708-17-4

Physical Properties

Property code	Value	Unit	Source
gf	84.34	kJ/mol	Joback Method
hf	-289.57	kJ/mol	Joback Method
hfus	12.47	kJ/mol	Joback Method
hvap	52.76	kJ/mol	Joback Method
log10ws	-5.83		Crippen Method
logp	5.707		Crippen Method
mcvol	214.580	ml/mol	McGowan Method
pc	1985.89	kPa	Joback Method
rinpol	1808.00		NIST Webbook
tb	621.66	K	Joback Method
tc	868.70	K	Joback Method
tf	270.76	K	Joback Method
vc	0.765	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	612.75	J/molxK	621.66	Joback Method
cpg	749.01	J/molxK	827.53	Joback Method
cpg	726.14	J/molxK	786.36	Joback Method
cpg	701.11	J/molxK	745.18	Joback Method
cpg	673.90	J/molxK	704.01	Joback Method
cpg	644.45	J/molxK	662.83	Joback Method
cpg	769.74	J/molxK	868.70	Joback Method

dvisc	0.0000570	Paxs	621.66	Joback Method
dvisc	0.0000929	Paxs	563.18	Joback Method
dvisc	0.0001693	Paxs	504.69	Joback Method
dvisc	0.0003614	Paxs	446.21	Joback Method
dvisc	0.0009693	Paxs	387.73	Joback Method
dvisc	0.0036919	Paxs	329.24	Joback Method
dvisc	0.0250568	Paxs	270.76	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6708174&Units=SI

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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