

Bicyclo[3.2.1]octane

Inchi:	InChI=1S/C8H14/c1-2-7-4-5-8(3-1)6-7/h7-8H,1-6H2
InchiKey:	LPCWKMYWISGVSK-UHFFFAOYSA-N
Formula:	C8H14
SMILES:	C1CC2CCC(C1)C2
Mol. weight [g/mol]:	110.20
CAS:	6221-55-2

Physical Properties

Property code	Value	Unit	Source
gf	113.78	kJ/mol	Joback Method
hf	-75.17	kJ/mol	Joback Method
hfus	8.55	kJ/mol	Joback Method
hvap	33.57	kJ/mol	Joback Method
log10ws	-2.48		Crippen Method
logp	2.587		Crippen Method
mcvol	101.860	ml/mol	McGowan Method
pc	3560.02	kPa	Joback Method
rinpol	874.00		NIST Webbook
rinpol	869.00		NIST Webbook
rinpol	876.50		NIST Webbook
rinpol	877.00		NIST Webbook
rinpol	881.00		NIST Webbook
rinpol	886.00		NIST Webbook
rinpol	869.00		NIST Webbook
rinpol	869.60		NIST Webbook
tb	404.46	K	Joback Method
tc	614.38	K	Joback Method
tf	208.76	K	Joback Method
vc	0.382	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	198.70	J/mol×K	404.46	Joback Method

cpg	279.71	J/molxK	579.39	Joback Method
cpg	265.55	J/molxK	544.41	Joback Method
cpg	250.43	J/molxK	509.42	Joback Method
cpg	234.29	J/molxK	474.43	Joback Method
cpg	217.06	J/molxK	439.45	Joback Method
cpg	292.95	J/molxK	614.38	Joback Method
dvisc	0.0004754	Paxs	404.46	Joback Method
dvisc	0.0005251	Paxs	371.84	Joback Method
dvisc	0.0005912	Paxs	339.23	Joback Method
dvisc	0.0006827	Paxs	306.61	Joback Method
dvisc	0.0008158	Paxs	273.99	Joback Method
dvisc	0.0010230	Paxs	241.38	Joback Method
dvisc	0.0013767	Paxs	208.76	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=C6221552&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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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