Bicyclo[3.2.0]hept-1-ene

Inchi: InChI=1S/C7H10/c1-2-6-4-5-7(6)3-1/h2,7H,1,3-5H2
InchiKey: PKCMTAKKGOCYFF-UHFFFAOYSA-N
Formula: C7H10
SMILES: C1=C2CCC2CC1
Mol. weight [g/mol]: 94.15
CAS: 22630-75-7

Physical Properties

Property code	Value	Unit	Source
gf	145.50	kJ/mol	Joback Method
hf	167.00	kJ/mol	NIST Webbook
hfus	7.82	kJ/mol	Joback Method
hvap	32.44	kJ/mol	Joback Method
log10ws	-2.15		Crippen Method
logp	2.117		Crippen Method
mcvol	83.470	ml/mol	McGowan Method
pc	4156.97	kPa	Joback Method
tb	386.12	K	Joback Method
tc	593.57	K	Joback Method
tf	218.53	K	Joback Method
vc	0.321	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	149.72	J/mol×K	386.12	Joback Method
cpg	210.82	J/mol×K	558.99	Joback Method
cpg	200.33	J/mol×K	524.42	Joback Method
cpg	189.03	J/mol×K	489.84	Joback Method
cpg	176.87	J/mol×K	455.27	Joback Method
cpg	163.79	J/mol×K	420.69	Joback Method
cpg	220.57	J/mol×K	593.57	Joback Method
dvisc	0.0004370	Pa×s	386.12	Joback Method
dvisc	0.0004598	Pa×s	358.19	Joback Method

dvisc	0.0004880	Pa×s	330.26	Joback Method
dvisc	0.0005236	Pa×s	302.32	Joback Method
dvisc	0.0005700	Pa×s	274.39	Joback Method
dvisc	0.0006325	Pa×s	246.46	Joback Method
dvisc	0.0007207	Pa×s	218.53	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C22630757&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume