Bicyclo[3.2.0]hept-1(5)-ene

Inchi: InChI=1S/C7H10/c1-2-6-4-5-7(6)3-1/h1-5H2
InchiKey: VQQXDBPNEPNNNS-UHFFFAOYSA-N
Formula: C7H10
SMILES: C1CC2=C(C1)CC2
Mol. weight [g/mol]: 94.15
CAS: 10563-10-7

Physical Properties

Property code	Value	Unit	Source
gf	143.58	kJ/mol	Joback Method
hf	173.00	kJ/mol	NIST Webbook
hfus	6.36	kJ/mol	Joback Method
hvap	33.41	kJ/mol	Joback Method
log10ws	-2.40		Crippen Method
logp	2.261		Crippen Method
mcvol	83.470	ml/mol	McGowan Method
pc	4255.16	kPa	Joback Method
tb	395.77	K	Joback Method
tc	605.46	K	Joback Method
tf	235.29	K	Joback Method
vc	0.322	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	151.07	J/mol×K	395.77	Joback Method
cpg	164.25	J/mol×K	430.72	Joback Method
cpg	176.48	J/mol×K	465.67	Joback Method
cpg	187.81	J/mol×K	500.61	Joback Method
cpg	198.32	J/mol×K	535.56	Joback Method
cpg	208.08	J/mol×K	570.51	Joback Method
cpg	217.14	J/mol×K	605.46	Joback Method
dvisc	0.0009903	Pa×s	235.29	Joback Method
dvisc	0.0008152	Pa×s	262.04	Joback Method

dvisc	0.0006958	Pa×s	288.78	Joback Method
dvisc	0.0006100	Pa×s	315.53	Joback Method
dvisc	0.0005459	Pa×s	342.28	Joback Method
dvisc	0.0004964	Pa×s	369.02	Joback Method
dvisc	0.0004573	Pa×s	395.77	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C10563107&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