Tricyclo[4.2.0.0^{2,5}]oct-3-ene,(1&#945

Other names: Tricyclo[4.2.0.0
Inchi: InChI=1S/C8H10/c1-2-6-5(1)7-3-4-8(6)7/h1-2,5-8H,3-4H2
InchiKey: YHCXYJYRBADQSN-UHFFFAOYSA-N
Formula: C8H10
SMILES: C1=CC2C1C1CCC21
Mol. weight [g/mol]: 106.17
CAS: 39781-76-5

Physical Properties

Property code	Value	Unit	Source
gf	233.08	kJ/mol	Joback Method
hf	53.55	kJ/mol	Joback Method
hfus	15.27	kJ/mol	Joback Method
hvap	32.95	kJ/mol	Joback Method
ie	9.25	eV	NIST Webbook
log10ws	-1.74		Crippen Method
logp	1.828		Crippen Method
mcvol	86.700	ml/mol	McGowan Method
pc	3819.82	kPa	Joback Method
tb	392.88	K	Joback Method
tc	596.21	K	Joback Method
tf	233.78	K	Joback Method
vc	0.347	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	174.43	J/mol×K	392.88	Joback Method
cpg	190.64	J/mol×K	426.77	Joback Method
cpg	205.57	J/mol×K	460.66	Joback Method
cpg	219.33	J/mol×K	494.55	Joback Method
cpg	231.99	J/mol×K	528.44	Joback Method
cpg	243.65	J/mol×K	562.32	Joback Method
cpg	254.40	J/mol×K	596.21	Joback Method

dvisc	0.0001254	Pa×s	233.78	Joback Method
dvisc	0.0001973	Pa×s	260.30	Joback Method
dvisc	0.0002855	Pa×s	286.81	Joback Method
dvisc	0.0003881	Pa×s	313.33	Joback Method
dvisc	0.0005030	Pa×s	339.85	Joback Method
dvisc	0.0006277	Pa×s	366.36	Joback Method
dvisc	0.0007604	Pa×s	392.88	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C39781765&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
ie:	Ionization energy
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