Tricyclo[4.2.2.0^{2,5}]decane,7,8-bis(m

Other names: Tricyclo[4.2.2.0
Inchi: InChI=1S/C12H16/c1-7-8(2)12-10-5-3-9(4-6-10)11(7)12/h9-12H,1-6H2
InchiKey: YUKWNZNIRAABSA-UHFFFAOYSA-N
Formula: C12H16
SMILES: C=C1C(=C)C2C3CCC(CC3)C12
Mol. weight [g/mol]: 160.26
CAS: 36439-92-6

Physical Properties

Property code	Value	Unit	Source
gf	318.76	kJ/mol	Joback Method
hf	69.37	kJ/mol	Joback Method
hfus	17.89	kJ/mol	Joback Method
hvap	42.23	kJ/mol	Joback Method
ie	8.27 ± 0.03	eV	NIST Webbook
log10ws	-3.27		Crippen Method
logp	3.165		Crippen Method
mcvol	138.760	ml/mol	McGowan Method
pc	2629.85	kPa	Joback Method
tb	492.10	K	Joback Method
tc	703.50	K	Joback Method
tf	298.42	K	Joback Method
vc	0.537	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	333.31	J/mol×K	492.10	Joback Method
cpg	352.59	J/mol×K	527.33	Joback Method
cpg	370.61	J/mol×K	562.57	Joback Method
cpg	387.45	J/mol×K	597.80	Joback Method
cpg	403.19	J/mol×K	633.04	Joback Method
cpg	417.92	J/mol×K	668.27	Joback Method
cpg	431.72	J/mol×K	703.50	Joback Method

dvisc	0.0008564	Pa×s	298.42	Joback Method
dvisc	0.0009910	Pa×s	330.70	Joback Method
dvisc	0.0011173	Pa×s	362.98	Joback Method
dvisc	0.0012354	Pa×s	395.26	Joback Method
dvisc	0.0013453	Pa×s	427.54	Joback Method
dvisc	0.0014476	Pa×s	459.82	Joback Method
dvisc	0.0015428	Pa×s	492.10	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C36439926&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

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