Syn-7,14-dihydro-7,14-dimethylene-1,6:8,13-bisme

Inchi: InChI=1S/C18H16/c1-13-15-7-3-5-9-17(11-15)14(2)18-10-6-4-8-16(13)12-18/h3-10H,1-2
InchiKey: RGWOSRBWFUXUPC-UHFFFAOYSA-N
Formula: C18H16
SMILES: C=C1C2=CC=CC=C(C2)C(=C)C2=CC=CC=C1C2
Mol. weight [g/mol]: 232.32
CAS: 109216-46-8

Physical Properties

Property code	Value	Unit	Source
gf	468.76	kJ/mol	Joback Method
hf	290.73	kJ/mol	Joback Method
hfus	22.33	kJ/mol	Joback Method
hvap	62.25	kJ/mol	Joback Method
ie	7.90	eV	NIST Webbook
ie	7.70	eV	NIST Webbook
log10ws	-5.87		Crippen Method
logp	4.738		Crippen Method
mcvol	197.500	ml/mol	McGowan Method
pc	2293.71	kPa	Joback Method
tb	688.56	K	Joback Method
tc	938.64	K	Joback Method
tf	416.52	K	Joback Method
vc	0.746	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	513.27	J/mol×K	688.56	Joback Method
cpg	530.81	J/mol×K	730.24	Joback Method
cpg	546.98	J/mol×K	771.92	Joback Method
cpg	561.89	J/mol×K	813.60	Joback Method
cpg	575.63	J/mol×K	855.28	Joback Method
cpg	588.33	J/mol×K	896.96	Joback Method
cpg	600.08	J/mol×K	938.64	Joback Method

dvisc	0.0012230	Pa×s	416.52	Joback Method
dvisc	0.0008368	Pa×s	461.86	Joback Method
dvisc	0.0006128	Pa×s	507.20	Joback Method
dvisc	0.0004722	Pa×s	552.54	Joback Method
dvisc	0.0003786	Pa×s	597.88	Joback Method
dvisc	0.0003132	Pa×s	643.22	Joback Method
dvisc	0.0002656	Pa×s	688.56	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C109216468&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
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