Cyclobuta[1,2-a:3,4-a']diacenaphthylene, 6b,6c,12b,12c-tetrahydro-(6b«alpha»,6c«beta»,12b«beta»,12c«alpha»)-

InChI: InChI=1S/C24H16/c1-5-13-9-10-16-19(13)15(9-1)21-22(16)24-18-12-4-8-14-7-3-11-17(

InChIKey: TVMWOWUBPJVYIC-NVPYSNMXSA-N

Formula: C24H16

SMILES: c1cc2c3c(cccc3c1)C1C2C2c3cccc4cccc(c34)C12

Mol. weight [g/mol]: 304.38

CAS: 14620-98-5

Physical Properties

Property code	Value	Unit	Source
gf	785.84	kJ/mol	Joback Method
hf	499.49	kJ/mol	Joback Method
hfus	44.46	kJ/mol	Joback Method
hvap	78.07	kJ/mol	Joback Method
ie	7.48	eV	NIST Webbook
log10ws	-7.81		Crippen Method
logp	6.068		Crippen Method
mcvol	230.000	ml/mol	McGowan Method
pc	2069.88	kPa	Joback Method
tb	853.96	K	Joback Method
tc	1111.91	K	Joback Method
tf	595.74	K	Joback Method
vc	0.917	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	707.35	J/mol×K	853.96	Joback Method
cpg	723.79	J/mol×K	896.95	Joback Method
cpg	740.18	J/mol×K	939.94	Joback Method
cpg	756.90	J/mol×K	982.94	Joback Method
cpg	774.33	J/mol×K	1025.93	Joback Method
cpg	792.87	J/mol×K	1068.92	Joback Method
cpg	812.89	J/mol×K	1111.91	Joback Method
dvisc	0.0358504	Pa×s	595.74	Joback Method

dvisc	0.0402571	Pa×s	638.78	Joback Method
dvisc	0.0445486	Pa×s	681.81	Joback Method
dvisc	0.0487082	Pa×s	724.85	Joback Method
dvisc	0.0527260	Pa×s	767.89	Joback Method
dvisc	0.0565971	Pa×s	810.92	Joback Method
dvisc	0.0603200	Pa×s	853.96	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C14620985&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