Dibenzo[a,e]cyclooctene, 5,6,11,12-tetrahydro-

Other names:	Dibenzocycloocta-1,5-diene
	s-Dibenzocyclooctadiene
	Cyclo-di-o-xylylene
	1,2:5,6-Dibenzocyclooctane
	5,6,11,12-Tetrahydrodibenzo[a,e]cyclooctene
Inchi:	InChI=1S/C16H16/c1-2-6-14-11-12-16-8-4-3-7-15(16)10-9-13(14)5-1/h1-8H,9-12H2
InchiKey:	PCQPMHABIFETBJ-UHFFFAOYSA-N
Formula:	C16H16
SMILES:	c1ccc2c(c1)CCc1ccccc1CC2
Mol. weight [g/mol]:	208.30
CAS:	1460-59-9

Physical Properties

Property code	Value	Unit	Source
gf	345.76	kJ/mol	Joback Method
hf	163.53	kJ/mol	Joback Method
hfus	19.46	kJ/mol	Joback Method
hvap	57.48	kJ/mol	Joback Method
log10ws	-4.55		Crippen Method
logp	3.570		Crippen Method
mcvol	177.920	ml/mol	McGowan Method
pc	2673.54	kPa	Joback Method
tb	644.48	K	Joback Method
tc	901.88	K	Joback Method
tf	366.62	K	Joback Method
vc	0.665	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	456.99	J/mol×K	644.48	Joback Method
cpg	476.19	J/mol×K	687.38	Joback Method
cpg	493.79	J/mol×K	730.28	Joback Method
cpg	509.95	J/mol×K	773.18	Joback Method

cpg	524.78	J/mol×K	816.08	Joback Method
cpg	538.42	J/mol×K	858.98	Joback Method
cpg	551.01	J/mol×K	901.88	Joback Method
dvisc	0.0018114	Pa×s	366.62	Joback Method
dvisc	0.0010682	Pa×s	412.93	Joback Method
dvisc	0.0007007	Pa×s	459.24	Joback Method
dvisc	0.0004965	Pa×s	505.55	Joback Method
dvisc	0.0003728	Pa×s	551.86	Joback Method
dvisc	0.0002926	Pa×s	598.17	Joback Method
dvisc	0.0002378	Pa×s	644.48	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1460599&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
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