5H-Dibenzo[a,d]cycloheptene

Other names:	Dibenzo[a,d]cycloheptatriene
	Dibenzo[a,e]cycloheptatriene
	Suberene
	1,2:5,6-Dibenzcycloheptatriene
	1,2:5,6-Dibenzotropilidene
	2,3:6,7-Dibenzocycloheptatriene
	2,3:6,7-Dibenzo-4-suberene
	Dibenzo[a,d]cycloheptene
	5H-Dibenzo[a,d]cycloheptatriene
Inchi:	InChI=1S/C15H12/c1-3-7-14-11-15-8-4-2-6-13(15)10-9-12(14)5-1/h1-10H,11H2
InchiKey:	QPJORFLSOJAUNL-UHFFFAOYSA-N
Formula:	C15H12
SMILES:	C1=Cc2ccccc2Cc2ccccc21
Mol. weight [g/mol]:	192.26
CAS:	256-81-5

Physical Properties

Property code	Value	Unit	Source
gf	379.40	kJ/mol	Joback Method
hf	248.11	kJ/mol	Joback Method
hfus	20.20	kJ/mol	Joback Method
hvap	55.37	kJ/mol	Joback Method
ie	7.60	eV	NIST Webbook
ie	7.95	eV	NIST Webbook
log10ws	-4.42		Crippen Method
logp	3.761		Crippen Method
mcvol	159.530	ml/mol	McGowan Method
pc	2995.87	kPa	Joback Method
tb	616.49	K	Joback Method
tc	873.57	K	Joback Method
tf	359.63	K	Joback Method
vc	0.604	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	383.27	J/mol×K	616.49	Joback Method
cpg	399.78	J/mol×K	659.34	Joback Method
cpg	414.86	J/mol×K	702.18	Joback Method
cpg	428.65	J/mol×K	745.03	Joback Method
cpg	441.30	J/mol×K	787.87	Joback Method
cpg	452.94	J/mol×K	830.72	Joback Method
cpg	463.71	J/mol×K	873.57	Joback Method
dvisc	0.0016065	Pa×s	359.63	Joback Method
dvisc	0.0010862	Pa×s	402.44	Joback Method
dvisc	0.0007918	Pa×s	445.25	Joback Method
dvisc	0.0006101	Pa×s	488.06	Joback Method
dvisc	0.0004903	Pa×s	530.87	Joback Method
dvisc	0.0004071	Pa×s	573.68	Joback Method
dvisc	0.0003468	Pa×s	616.49	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C256815&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