Cyclopropane, 1,1'-ethenylidenebis-

Other names:	Ethylene, 1,1-dicyclopropyl-
	1,1-Dicyclopropylethene
	1,1-Dicyclopropylethylene
	1,1'-vinylidenebiscyclopropane
Inchi:	InChI=1S/C8H12/c1-6(7-2-3-7)8-4-5-8/h7-8H,1-5H2
InchiKey:	RXCSODBXHNSSCQ-UHFFFAOYSA-N
Formula:	C8H12
SMILES:	C=C(C1CC1)C1CC1
Mol. weight [g/mol]:	108.18
CAS:	822-93-5

Physical Properties

Property code	Value	Unit	Source
affp	904.70	kJ/mol	NIST Webbook
basg	875.80	kJ/mol	NIST Webbook
gf	217.27	kJ/mol	Joback Method
hf	52.79	kJ/mol	Joback Method
hfus	10.16	kJ/mol	Joback Method
hvap	32.64	kJ/mol	Joback Method
ie	8.87	eV	NIST Webbook
ie	8.08	eV	NIST Webbook
log10ws	-2.33		Crippen Method
logp	2.363		Crippen Method
mcvol	97.560	ml/mol	McGowan Method
pc	3547.31	kPa	Joback Method
tb	392.48	K	Joback Method
tc	594.03	K	Joback Method
tf	200.08	K	Joback Method
vc	0.380	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	185.94	J/mol×K	392.48	Joback Method

cpg	202.04	J/mol×K	426.07	Joback Method
cpg	217.04	J/mol×K	459.66	Joback Method
cpg	230.99	J/mol×K	493.26	Joback Method
cpg	243.98	J/mol×K	526.85	Joback Method
cpg	256.06	J/mol×K	560.44	Joback Method
cpg	267.30	J/mol×K	594.03	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C822935&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

affp:	Proton affinity
basg:	Gas basicity
cpg:	Ideal gas heat capacity
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