Cyclobutane, 1,2-diphenyl, cis

Inchi: InChI=1S/C16H16/c1-3-7-13(8-4-1)15-11-12-16(15)14-9-5-2-6-10-14/h1-10,15-16H,11-12
InchiKey: AERGGMDNGDDGPI-IYBDPMFKSA-N
Formula: C16H16
SMILES: c1ccc(C2CCC2c2ccccc2)cc1
Mol. weight [g/mol]: 208.30

Physical Properties

Property code	Value	Unit	Source
gf	349.60	kJ/mol	Joback Method
hf	145.79	kJ/mol	Joback Method
hfus	22.38	kJ/mol	Joback Method
hvap	55.54	kJ/mol	Joback Method
log10ws	-4.55		Crippen Method
logp	4.348		Crippen Method
mcvol	177.920	ml/mol	McGowan Method
pc	2576.72	kPa	Joback Method
rinpol	1640.00		NIST Webbook
rinpol	1640.00		NIST Webbook
tb	625.18	K	Joback Method
tc	881.09	K	Joback Method
tf	333.10	K	Joback Method
vc	0.663	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	461.63	J/mol×K	625.18	Joback Method
cpg	550.39	J/mol×K	838.44	Joback Method
cpg	535.66	J/mol×K	795.79	Joback Method
cpg	519.54	J/mol×K	753.14	Joback Method
cpg	501.91	J/mol×K	710.48	Joback Method
cpg	482.65	J/mol×K	667.83	Joback Method
cpg	563.88	J/mol×K	881.09	Joback Method
dvisc	0.0003289	Pa×s	625.18	Joback Method

dvisc	0.0003938	Pa×s	576.50	Joback Method
dvisc	0.0004875	Pa×s	527.82	Joback Method
dvisc	0.0006302	Pa×s	479.14	Joback Method
dvisc	0.0008633	Pa×s	430.46	Joback Method
dvisc	0.0012816	Pa×s	381.78	Joback Method
dvisc	0.0021353	Pa×s	333.10	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R310046&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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume