

Cyclobutadicyclopentene, decahydro

Inchi:	InChI=1S/C10H16/c1-3-7-8(4-1)10-6-2-5-9(7)10/h7-10H,1-6H2
InchiKey:	BYUYDIMKUWDDNV-UHFFFAOYSA-N
Formula:	C10H16
SMILES:	C1CC2C(C1)C1CCCC21
Mol. weight [g/mol]:	136.23
CAS:	5650-12-4

Physical Properties

Property code	Value	Unit	Source
gf	195.76	kJ/mol	Joback Method
hf	-57.83	kJ/mol	Joback Method
hfus	15.03	kJ/mol	Joback Method
hvap	37.46	kJ/mol	Joback Method
log10ws	-2.73		Crippen Method
logp	2.833		Crippen Method
mcvol	119.180	ml/mol	McGowan Method
pc	3100.18	kPa	Joback Method
tb	448.02	K	Joback Method
tc	661.62	K	Joback Method
tf	248.52	K	Joback Method
vc	0.458	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	272.54	J/mol×K	448.02	Joback Method
cpg	293.60	J/mol×K	483.62	Joback Method
cpg	313.20	J/mol×K	519.22	Joback Method
cpg	331.44	J/mol×K	554.82	Joback Method
cpg	348.41	J/mol×K	590.42	Joback Method
cpg	364.21	J/mol×K	626.02	Joback Method
cpg	378.92	J/mol×K	661.62	Joback Method
dvisc	0.0006121	Paxs	248.52	Joback Method
dvisc	0.0007158	Paxs	281.77	Joback Method

dvisc	0.0008100	Paxs	315.02	Joback Method
dvisc	0.0008951	Paxs	348.27	Joback Method
dvisc	0.0009721	Paxs	381.52	Joback Method
dvisc	0.0010419	Paxs	414.77	Joback Method
dvisc	0.0011052	Paxs	448.02	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5650124&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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