

Cyclobutane, ethenyl-

Other names:	Cyclobutane, vinyl- Ethylene, cyclobutyl- Vinylcyclobutane Ethenylcyclobutane
Inchi:	InChI=1S/C6H10/c1-2-6-4-3-5-6/h2,6H,1,3-5H2
InchiKey:	SQZFVNSRRPRBQP-UHFFFAOYSA-N
Formula:	C6H10
SMILES:	C=CC1CCC1
Mol. weight [g/mol]:	82.14
CAS:	2597-49-1

Physical Properties

Property code	Value	Unit	Source
gf	136.13	kJ/mol	Joback Method
hf	24.90	kJ/mol	Joback Method
hfus	6.05	kJ/mol	Joback Method
hvap	28.37	kJ/mol	Joback Method
ie	9.44	eV	NIST Webbook
ie	9.44	eV	NIST Webbook
log10ws	-1.84		Crippen Method
logp	1.973		Crippen Method
mcvol	80.240	ml/mol	McGowan Method
pc	3920.94	kPa	Joback Method
tb	344.37	K	Joback Method
tc	535.01	K	Joback Method
tf	170.04	K	Joback Method
vc	0.301	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	125.24	J/mol×K	344.37	Joback Method
cpg	137.72	J/mol×K	376.14	Joback Method
cpg	149.52	J/mol×K	407.92	Joback Method

cpg	160.68	J/molxK	439.69	Joback Method
cpg	171.22	J/molxK	471.47	Joback Method
cpg	181.17	J/molxK	503.24	Joback Method
cpg	190.56	J/molxK	535.01	Joback Method
dvisc	0.0011930	Paxs	170.04	Joback Method
dvisc	0.0007715	Paxs	199.09	Joback Method
dvisc	0.0005576	Paxs	228.15	Joback Method
dvisc	0.0004336	Paxs	257.20	Joback Method
dvisc	0.0003549	Paxs	286.26	Joback Method
dvisc	0.0003014	Paxs	315.31	Joback Method
dvisc	0.0002631	Paxs	344.37	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=C2597491&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
hvac:	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

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