Cyclobutanol, 1-phenyl-

Other names: Benzene,cyclobut-1-yl-1-ol-
Inchi: InChI=1S/C10H12O/c11-10(7-4-8-10)9-5-2-1-3-6-9/h1-3,5-6,11H,4,7-8H2
InchiKey: LHXASHUXCRQHPZ-UHFFFAOYSA-N
Formula: C10H12O
SMILES: OC1(c2ccccc2)CCC1
Mol. weight [g/mol]: 148.20
CAS: 935-64-8

Physical Properties

Property code	Value	Unit	Source
gf	52.07	kJ/mol	Joback Method
hf	-83.55	kJ/mol	Joback Method
hfus	9.52	kJ/mol	Joback Method
hvap	55.74	kJ/mol	Joback Method
ie	8.00	eV	NIST Webbook
log10ws	-2.44		Crippen Method
logp	2.058		Crippen Method
mcvol	123.010	ml/mol	McGowan Method
pc	4135.61	kPa	Joback Method
tb	558.31	K	Joback Method
tc	780.73	K	Joback Method
tf	312.60 ± 1.00	K	NIST Webbook
vc	0.454	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	296.44	J/mol×K	558.31	Joback Method
cpg	309.99	J/mol×K	595.38	Joback Method
cpg	322.51	J/mol×K	632.45	Joback Method
cpg	334.16	J/mol×K	669.52	Joback Method
cpg	345.08	J/mol×K	706.59	Joback Method
cpg	355.44	J/mol×K	743.66	Joback Method
cpg	365.38	J/mol×K	780.73	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C935648&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

Legend

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