Benzene, 1-cyclopenten-1-yl-

Other names: 1-Phenylcyclopentene
Inchi: InChI=1S/C11H12/c1-2-6-10(7-3-1)11-8-4-5-9-11/h1-3,6-8H,4-5,9H2
InchiKey: CXMYOMKBXNPDIW-UHFFFAOYSA-N
Formula: C11H12
SMILES: C1=C(c2ccccc2)CCC1
Mol. weight [g/mol]: 144.21
CAS: 825-54-7

Physical Properties

Property code	Value	Unit	Source
gf	218.74	kJ/mol	Joback Method
hf	93.29	kJ/mol	Joback Method
hfus	11.98	kJ/mol	Joback Method
hvap	43.88	kJ/mol	Joback Method
ie	8.15	eV	NIST Webbook
log10ws	-3.45		Crippen Method
logp	3.254		Crippen Method
mcvol	126.930	ml/mol	McGowan Method
pc	3423.86	kPa	Joback Method
tb	501.85	K	Joback Method
tc	741.94	K	Joback Method
tf	268.57	K	Joback Method
vc	0.471	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	268.58	J/mol×K	501.85	Joback Method
cpg	285.78	J/mol×K	541.86	Joback Method
cpg	301.72	J/mol×K	581.88	Joback Method
cpg	316.45	J/mol×K	621.89	Joback Method
cpg	330.07	J/mol×K	661.91	Joback Method
cpg	342.63	J/mol×K	701.92	Joback Method
cpg	354.23	J/mol×K	741.94	Joback Method

dvisc	0.0029302	Pa×s	268.57	Joback Method
dvisc	0.0015220	Pa×s	307.45	Joback Method
dvisc	0.0009158	Pa×s	346.33	Joback Method
dvisc	0.0006105	Pa×s	385.21	Joback Method
dvisc	0.0004384	Pa×s	424.09	Joback Method
dvisc	0.0003329	Pa×s	462.97	Joback Method
dvisc	0.0002637	Pa×s	501.85	Joback Method

Sources

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=C825547&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
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