Benzene,2-cyclopenten-1-yl-

Other names: 3-Phenyl-1-cyclopentene
Inchi: InChI=1S/C11H12/c1-2-6-10(7-3-1)11-8-4-5-9-11/h1-4,6-8,11H,5,9H2
InchiKey: ZOZIUVMYACMJGS-UHFFFAOYSA-N
Formula: C11H12
SMILES: C1=CC(c2ccccc2)CC1
Mol. weight [g/mol]: 144.21
CAS: 37689-22-8

Physical Properties

Property code	Value	Unit	Source
gf	220.66	kJ/mol	Joback Method
hf	84.42	kJ/mol	Joback Method
hfus	13.44	kJ/mol	Joback Method
hvap	42.91	kJ/mol	Joback Method
ie	9.20 ± 0.05	eV	NIST Webbook
log10ws	-3.24		Crippen Method
logp	3.120		Crippen Method
mcvol	126.930	ml/mol	McGowan Method
pc	3352.86	kPa	Joback Method
tb	492.20	K	Joback Method
tc	730.84	K	Joback Method
tf	251.81	K	Joback Method
vc	0.470	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	268.90	J/mol×K	492.20	Joback Method
cpg	347.12	J/mol×K	691.07	Joback Method
cpg	333.84	J/mol×K	651.30	Joback Method
cpg	319.46	J/mol×K	611.52	Joback Method
cpg	303.88	J/mol×K	571.75	Joback Method
cpg	287.06	J/mol×K	531.97	Joback Method
cpg	359.36	J/mol×K	730.84	Joback Method

dvisc	0.0002887	Pa×s	492.20	Joback Method
dvisc	0.0003579	Pa×s	452.13	Joback Method
dvisc	0.0004628	Pa×s	412.07	Joback Method
dvisc	0.0006324	Pa×s	372.00	Joback Method
dvisc	0.0009318	Pa×s	331.94	Joback Method
dvisc	0.0015273	Pa×s	291.88	Joback Method
dvisc	0.0029293	Pa×s	251.81	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C37689228&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
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