

1-Phenyl-1-cyclohexene

Other names:	1-Phenylcyclohexene Benzene, cyclohexenyl- Phenylcyclohexene
Inchi:	InChI=1S/C12H14/c1-3-7-11(8-4-1)12-9-5-2-6-10-12/h1,3-4,7-9H,2,5-6,10H2
InchiKey:	WCMSFBRREKZZFL-UHFFFAOYSA-N
Formula:	C12H14
SMILES:	C1=C(c2ccccc2)CCCC1
Mol. weight [g/mol]:	158.24
CAS:	31017-40-0

Physical Properties

Property code	Value	Unit	Source
gf	215.06	kJ/mol	Joback Method
hf	66.49	kJ/mol	Joback Method
hfus	12.47	kJ/mol	Joback Method
hvap	46.27	kJ/mol	Joback Method
log10ws	-3.86		Crippen Method
logp	3.644		Crippen Method
mcvol	141.020	ml/mol	McGowan Method
pc	3156.17	kPa	Joback Method
tb	529.00	K	Joback Method
tc	773.62	K	Joback Method
tf	276.32	K	Joback Method
vc	0.519	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	314.64	J/molxK	529.00	Joback Method
cpg	333.73	J/molxK	569.77	Joback Method
cpg	351.42	J/molxK	610.54	Joback Method
cpg	367.79	J/molxK	651.31	Joback Method
cpg	382.91	J/molxK	692.08	Joback Method
cpg	396.85	J/molxK	732.85	Joback Method

cpg	409.68	J/mol×K	773.62	Joback Method
dvisc	0.0038097	Paxs	276.32	Joback Method
dvisc	0.0016896	Paxs	318.43	Joback Method
dvisc	0.0009061	Paxs	360.55	Joback Method
dvisc	0.0005536	Paxs	402.66	Joback Method
dvisc	0.0003713	Paxs	444.77	Joback Method
dvisc	0.0002668	Paxs	486.89	Joback Method
dvisc	0.0002021	Paxs	529.00	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=C31017400&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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
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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