

Benzene, 1,1'-cyclohexylidenebis-

Other names:	Cyclohexane, 1,1-diphenyl-
Inchi:	InChI=1S/C18H20/c1-4-10-16(11-5-1)18(14-8-3-9-15-18)17-12-6-2-7-13-17/h1-2,4-7,10-
InchiKey:	WLHJCCUFRCTNRZ-UHFFFAOYSA-N
Formula:	C18H20
SMILES:	<chem>c1ccc(C2(c3ccccc3)CCCCC2)cc1</chem>
Mol. weight [g/mol]:	236.35
CAS:	21113-55-3

Physical Properties

Property code	Value	Unit	Source
gf	344.46	kJ/mol	Joback Method
hf	127.77	kJ/mol	Joback Method
hfus	15.99	kJ/mol	Joback Method
hvap	59.49	kJ/mol	Joback Method
ie	8.90 ± 0.20	eV	NIST Webbook
log10ws	-5.23		Crippen Method
logp	4.937		Crippen Method
mcvol	206.100	ml/mol	McGowan Method
pc	2417.12	kPa	Joback Method
tb	684.39	K	Joback Method
tc	956.02	K	Joback Method
tf	376.74	K	Joback Method
vc	0.758	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	567.26	J/molxK	684.39	Joback Method
cpg	590.15	J/molxK	729.66	Joback Method
cpg	611.40	J/molxK	774.93	Joback Method
cpg	631.30	J/molxK	820.21	Joback Method
cpg	650.19	J/molxK	865.48	Joback Method
cpg	668.36	J/molxK	910.75	Joback Method
cpg	686.14	J/molxK	956.02	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=C21113553&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws

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

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