p-Dicyclohexylbenzene

Other names: 1,4-Dicyclohexylbenzene
Benzene, 1,4-dicyclohexyl-
Benzene, p-dicyclohexyl-
Inchi: InChI=1S/C18H26/c1-3-7-15(8-4-1)17-11-13-18(14-12-17)16-9-5-2-6-10-16/h11-16H,1-1
InchiKey: QQFSIGWYINAJOB-UHFFFAOYSA-N
Formula: C18H26
SMILES: c1cc(C2CCCCC2)ccc1C1CCCCC1
Mol. weight [g/mol]: 242.40
CAS: 1087-02-1

Physical Properties

Property code	Value	Unit	Source
gf	252.36	kJ/mol	Joback Method
hf	-81.15	kJ/mol	Joback Method
hfus	19.70	kJ/mol	Joback Method
hvap	59.46	kJ/mol	Joback Method
log10ws	-6.14		Crippen Method
logp	5.782		Crippen Method
mcvol	219.000	ml/mol	McGowan Method
pc	2029.06	kPa	Joback Method
rinpol	2050.00		NIST Webbook
rinpol	2050.00		NIST Webbook
tb	682.00	K	Joback Method
tc	935.82	K	Joback Method
tf	370.90 ± 6.00	K	NIST Webbook
vc	0.801	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	644.29	J/mol×K	682.00	Joback Method
cpg	670.91	J/mol×K	724.30	Joback Method
cpg	695.39	J/mol×K	766.61	Joback Method
cpg	717.83	J/mol×K	808.91	Joback Method

cpg	738.33	J/mol×K	851.21	Joback Method
cpg	757.00	J/mol×K	893.51	Joback Method
cpg	773.94	J/mol×K	935.82	Joback Method
dvisc	0.0032900	Pa×s	346.32	Joback Method
dvisc	0.0013403	Pa×s	402.27	Joback Method
dvisc	0.0006799	Pa×s	458.21	Joback Method
dvisc	0.0003998	Pa×s	514.16	Joback Method
dvisc	0.0002609	Pa×s	570.11	Joback Method
dvisc	0.0001838	Pa×s	626.05	Joback Method
dvisc	0.0001371	Pa×s	682.00	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1087021&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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from: