2,3',4,5'-Tetramethyldiphenylmethane

Inchi: InChI=1S/C17H20/c1-12-5-6-17(15(4)8-12)11-16-9-13(2)7-14(3)10-16/h5-10H,11H2,1-4H
InchiKey: FTBUQITWOMJLQR-UHFFFAOYSA-N
Formula: C17H20
SMILES: Cc1cc(C)cc(Cc2ccc(C)cc2C)c1
Mol. weight [g/mol]: 224.34

Physical Properties

Property code	Value	Unit	Source
gf	278.56	kJ/mol	Joback Method
hf	32.97	kJ/mol	Joback Method
hfus	26.31	kJ/mol	Joback Method
hvap	60.64	kJ/mol	Joback Method
log10ws	-5.48		Crippen Method
logp	4.511		Crippen Method
mcvol	202.870	ml/mol	McGowan Method
pc	1978.82	kPa	Joback Method
rinpol	1808.00		NIST Webbook
rinpol	1806.00		NIST Webbook
rinpol	1806.00		NIST Webbook
tb	661.64	K	Joback Method
tc	890.84	K	Joback Method
tf	384.27	K	Joback Method
vc	0.771	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	522.98	J/mol×K	661.64	Joback Method
cpg	602.56	J/mol×K	852.64	Joback Method
cpg	588.77	J/mol×K	814.44	Joback Method
cpg	573.96	J/mol×K	776.24	Joback Method
cpg	558.09	J/mol×K	738.04	Joback Method
cpg	541.11	J/mol×K	699.84	Joback Method
cpg	615.39	J/mol×K	890.84	Joback Method

dvisc	0.0001331	Pa×s	661.64	Joback Method
dvisc	0.0001628	Pa×s	615.41	Joback Method
dvisc	0.0002057	Pa×s	569.18	Joback Method
dvisc	0.0002710	Pa×s	522.95	Joback Method
dvisc	0.0003764	Pa×s	476.73	Joback Method
dvisc	0.0005612	Pa×s	430.50	Joback Method
dvisc	0.0009211	Pa×s	384.27	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R520555&Units=SI

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