1,3,5-Trimethyl-2,6-di(cyclopentyl)benzene

Other names: 2,4-dicyclopentyl-1,3,5-trimethylbenzene
Inchi: InChI=1S/C19H28/c1-13-12-14(2)19(17-10-6-7-11-17)15(3)18(13)16-8-4-5-9-16/h12,16-1
InchiKey: RXLACTJALSDWAX-UHFFFAOYSA-N
Formula: C19H28
SMILES: Cc1cc(C)c(C2CCCC2)c(C)c1C1CCCC1
Mol. weight [g/mol]: 256.43
CAS: 94440-26-3

Physical Properties

Property code	Value	Unit	Source
gf	256.09	kJ/mol	Joback Method
hf	-123.88	kJ/mol	Joback Method
hfus	25.32	kJ/mol	Joback Method
hvap	63.33	kJ/mol	Joback Method
log10ws	-6.73		Crippen Method
logp	5.927		Crippen Method
mcvol	233.090	ml/mol	McGowan Method
pc	1720.31	kPa	Joback Method
tb	711.28	K	Joback Method
tc	946.83	K	Joback Method
tf	402.19	K	Joback Method
vc	0.874	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	695.68	J/mol×K	711.28	Joback Method
cpg	719.46	J/mol×K	750.54	Joback Method
cpg	741.58	J/mol×K	789.80	Joback Method
cpg	762.15	J/mol×K	829.06	Joback Method
cpg	781.23	J/mol×K	868.32	Joback Method
cpg	798.92	J/mol×K	907.58	Joback Method
cpg	815.27	J/mol×K	946.83	Joback Method
dvisc	0.0015249	Pa×s	402.19	Joback Method

dvisc	0.0009305	Pa×s	453.70	Joback Method
dvisc	0.0006280	Pa×s	505.22	Joback Method
dvisc	0.0004558	Pa×s	556.74	Joback Method
dvisc	0.0003493	Pa×s	608.25	Joback Method
dvisc	0.0002790	Pa×s	659.76	Joback Method
dvisc	0.0002303	Pa×s	711.28	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=C94440263&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume