Benzene, 1,1',1'',1''',1''''-(1,3-cyclopentadiene-1,2,3,4,5-penta

Inchi: InChI=1S/C35H26/c1-6-16-26(17-7-1)31-32(27-18-8-2-9-19-27)34(29-22-12-4-13-23-29)

InchiKey: YGLVWOUNCXBPJF-UHFFFAOYSA-N

Formula: C35H26

SMILES: c1ccc(C2=C(c3ccccc3)C(c3ccccc3)C(c3ccccc3)=C2c2ccccc2)cc1

Mol. weight [g/mol]: 446.58

CAS: 2519-10-0

Physical Properties

Property code	Value	Unit	Source
gf	863.82	kJ/mol	Joback Method
hf	547.08	kJ/mol	Joback Method
hfus	51.43	kJ/mol	Joback Method
hvap	108.37	kJ/mol	Joback Method
log10ws	-10.22		Crippen Method
logp	9.006		Crippen Method
mcvol	365.750	ml/mol	McGowan Method
pc	1340.78	kPa	Joback Method
tb	1167.12	K	Joback Method
tc	1462.29	K	Joback Method
tf	678.81	K	Joback Method
vc	1.369	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1201.32	J/mol×K	1167.12	Joback Method
cpg	1275.23	J/mol×K	1413.09	Joback Method
cpg	1260.18	J/mol×K	1363.90	Joback Method
cpg	1245.61	J/mol×K	1314.70	Joback Method
cpg	1231.17	J/mol×K	1265.51	Joback Method
cpg	1216.52	J/mol×K	1216.31	Joback Method
cpg	1291.10	J/mol×K	1462.29	Joback Method
dvisc	0.0000312	Pa×s	1167.12	Joback Method
dvisc	0.0000386	Pa×s	1085.73	Joback Method

dvisc	0.0000493	Pa×s	1004.35	Joback Method
dvisc	0.0000658	Pa×s	922.96	Joback Method
dvisc	0.0000928	Pa×s	841.58	Joback Method
dvisc	0.0001410	Pa×s	760.20	Joback Method
dvisc	0.0002368	Pa×s	678.81	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2519100&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:
https://www.chemeo.com/cid/78-049-2/Benzene-1-1-1-1-1-1-3-cyclopentadiene-1-2-3-4-5-pentayl-pentakis.pdf
Generated by Cheméo on 2024-10-12 07:05:45.410206998 +0000 UTC m=+3297608.047176245.
Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.