Benzene, 1,1',1'',1'''-(1,6-hexanediylidene)tetrakis-

Other names: 1,1,6,6-Tetraphenylhexane
Hexane, 1,1,6,6-tetraphenyl-
Inchi: InChI=1S/C30H30/c1-5-15-25(16-6-1)29(26-17-7-2-8-18-26)23-13-14-24-30(27-19-9-3-1
InchiKey: WUHPEKSUKIJIJF-UHFFFAOYSA-N
Formula: C30H30
SMILES: c1ccc(C(CCCCC(c2ccccc2)c2ccccc2)c2ccccc2)cc1
Mol. weight [g/mol]: 390.56
CAS: 2819-41-2

Physical Properties

Property code	Value	Unit	Source
gf	646.48	kJ/mol	Joback Method
hf	273.03	kJ/mol	Joback Method
hfus	42.57	kJ/mol	Joback Method
hvap	90.70	kJ/mol	Joback Method
log10ws	-8.92		Crippen Method
logp	8.211		Crippen Method
mcvol	338.520	ml/mol	McGowan Method
pc	1314.65	kPa	Joback Method
tb	991.64	K	Joback Method
tc	1249.82	K	Joback Method
tf	397.70 ± 2.00	K	NIST Webbook
tf	397.65 ± 0.50	K	NIST Webbook
vc	1.272	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1090.56	J/mol×K	991.64	Joback Method
cpg	1107.84	J/mol×K	1034.67	Joback Method
cpg	1123.82	J/mol×K	1077.70	Joback Method
cpg	1138.70	J/mol×K	1120.73	Joback Method
cpg	1152.70	J/mol×K	1163.76	Joback Method
cpg	1166.04	J/mol×K	1206.79	Joback Method

cpg	1178.92	J/mol×K	1249.82	Joback Method
dvisc	0.0006074	Pa×s	503.54	Joback Method
dvisc	0.0002411	Pa×s	584.89	Joback Method
dvisc	0.0001200	Pa×s	666.24	Joback Method
dvisc	0.0000695	Pa×s	747.59	Joback Method
dvisc	0.0000448	Pa×s	828.94	Joback Method
dvisc	0.0000312	Pa×s	910.29	Joback Method
dvisc	0.0000231	Pa×s	991.64	Joback Method
hvapt	108.10	kJ/mol	545.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	2.16429e+01
Coeff. B	-1.21519e+04
Coeff. C	-1.01080e+01
Temperature range (K), min.	579.14
Temperature range (K), max.	754.19

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=C2819412&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume