Benzopinacol

Other names:	1,2-Ethanediol, 1,1,2,2-tetraphenyl-
	«alpha»,«alpha»'-Bibenzhydrol
	Benzpinacol
	Tetraphenyl-1,2-ethanediol
	Tetraphenylethylene glycol
	1,1,2,2-Tetraphenyl-1,2-ethanediol
	Benzopinacole
	1,1,2,2-Tetraphenylethylene glycol
	Benzophenone pinacol
	Benzopinacone
	Benzpinacone
	NSC 120377
	1,1,2,2-tetraphenylethane-1,2-diol
Inchi:	InChI=1S/C26H22O2/c27-25(21-13-5-1-6-14-21,22-15-7-2-8-16-22)26(28,23-17-9-3-10-1
InchiKey:	MFEWNFVBWPABCX-UHFFFAOYSA-N
Formula:	C26H22O2
SMILES:	OC(c1ccccc1)(c1ccccc1)C(O)(c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	366.45
CAS:	464-72-2

Physical Properties

Property code	Value	Unit	Source
gf	349.72	kJ/mol	Joback Method
hf	44.19	kJ/mol	Joback Method
hfus	32.61	kJ/mol	Joback Method
hvap	113.34	kJ/mol	Joback Method
ie	8.42 ± 0.02	eV	NIST Webbook
log10ws	-6.19		Crippen Method
logp	4.859		Crippen Method
mcvol	293.900	ml/mol	McGowan Method
pc	2127.56	kPa	Joback Method
tb	1078.90	K	Joback Method
tc	1337.15	K	Joback Method
tf	614.94	K	Joback Method
vc	1.075	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	951.68	J/mol×K	1078.90	Joback Method
cpg	964.61	J/mol×K	1121.94	Joback Method
cpg	977.45	J/mol×K	1164.98	Joback Method
cpg	990.47	J/mol×K	1208.02	Joback Method
cpg	1003.96	J/mol×K	1251.07	Joback Method
cpg	1018.16	J/mol×K	1294.11	Joback Method
cpg	1033.36	J/mol×K	1337.15	Joback Method
dvisc	0.0000406	Pa×s	614.94	Joback Method
dvisc	0.0000118	Pa×s	692.27	Joback Method
dvisc	0.0000044	Pa×s	769.59	Joback Method
dvisc	0.0000020	Pa×s	846.92	Joback Method
dvisc	0.0000010	Pa×s	924.25	Joback Method
dvisc	0.0000006	Pa×s	1001.57	Joback Method
dvisc	0.0000003	Pa×s	1078.90	Joback Method

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=C464722&Units=SI
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
ie: Ionization energy
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