Diphenic anhydride

Other names:	Dibenz[c,e]oxepin-5,7-dione
	2,2'-Biphenyldicarboxylic anhydride
	2,2'-Diphenyldicarboxylic anhydride
	2,2'-Diphenic anhydride
	Diphenic acid anhydride
	NSC 67689
	biphenyl-2,2'-dicarboxylic anhydride
Inchi:	InChI=1S/C14H8O3/c15-13-11-7-3-1-5-9(11)10-6-2-4-8-12(10)14(16)17-13/h1-8H
InchiKey:	RTSGJTANVBJFFJ-UHFFFAOYSA-N
Formula:	C14H8O3
SMILES:	O=c1oc(=O)c2ccccc2c2ccccc12
Mol. weight [g/mol]:	224.21
CAS:	6050-13-1

Physical Properties

Property code	Value	Unit	Source
hsub	120.70 ± 4.00	kJ/mol	NIST Webbook
log10ws	-7.66		Crippen Method
logp	2.306		Crippen Method
mcvol	158.750	ml/mol	McGowan Method
rinpol	343.70		NIST Webbook
rinpol	343.70		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	91.40	kJ/mol	461.50	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6050131&Units=SI

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

hsub:	Enthalpy of sublimation at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
rinpol:	Non-polar retention indices