

4,4'-Oxydiphthalic dianhydride

Other names:	Bis-(3-phthalyl anhydride) ether
Inchi:	InChI=1S/C16H6O7/c17-13-9-3-1-7(5-11(9)15(19)22-13)21-8-2-4-10-12(6-8)16(20)23-14
InchiKey:	QQGYZOYWNCKGEK-UHFFFAOYSA-N
Formula:	C16H6O7
SMILES:	O=C1OC(=O)c2cc(Oc3ccc4c(c3)C(=O)OC4=O)ccc21
Mol. weight [g/mol]:	310.21
CAS:	1823-59-2

Physical Properties

Property code	Value	Unit	Source
gf	-360.54	kJ/mol	Joback Method
hf	-707.13	kJ/mol	Joback Method
hfus	33.04	kJ/mol	Joback Method
hvap	87.27	kJ/mol	Joback Method
log10ws	-4.02		Crippen Method
logp	2.100		Crippen Method
mcvol	190.950	ml/mol	McGowan Method
pc	3376.28	kPa	Joback Method
ss	319.20	J/molxK	NIST Webbook
tb	1009.18	K	Joback Method
tc	1297.48	K	Joback Method
tf	765.61	K	Joback Method
vc	0.720	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	597.31	J/molxK	1009.18	Joback Method
cpg	603.89	J/molxK	1057.23	Joback Method
cpg	608.07	J/molxK	1105.28	Joback Method
cpg	609.78	J/molxK	1153.33	Joback Method
cpg	608.92	J/molxK	1201.38	Joback Method
cpg	605.40	J/molxK	1249.43	Joback Method
cpg	599.12	J/molxK	1297.48	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C1823592&Units=SI

Legend

cpg:	Ideal gas heat capacity
cps:	Solid phase heat capacity
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
ss:	Solid phase molar entropy at standard conditions
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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