Naphtho[1,2-c]furan-1,3-dione

Other names: 1,2-Naphthalic acid anhydride
Inchi: InChI=1S/C12H6O3/c13-11-9-6-5-7-3-1-2-4-8(7)10(9)12(14)15-11/h1-6H
InchiKey: IDVDAZFXGGNIDQ-UHFFFAOYSA-N
Formula: C12H6O3
SMILES: O=C1OC(=O)c2c1ccc1ccccc21
Mol. weight [g/mol]: 198.17
CAS: 5343-99-7

Physical Properties

Property code	Value	Unit	Source
gf	-12.88	kJ/mol	Joback Method
hf	-200.61	kJ/mol	Joback Method
hfus	21.18	kJ/mol	Joback Method
hvap	60.77	kJ/mol	Joback Method
log10ws	-3.73		Crippen Method
logp	2.150		Crippen Method
mcvol	134.870	ml/mol	McGowan Method
pc	3906.25	kPa	Joback Method
rinpol	310.04		NIST Webbook
tb	703.58	K	Joback Method
tc	975.82	K	Joback Method
tf	494.35	K	Joback Method
vc	0.514	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	350.21	J/mol×K	703.58	Joback Method
cpg	362.66	J/mol×K	748.95	Joback Method
cpg	374.06	J/mol×K	794.33	Joback Method
cpg	384.47	J/mol×K	839.70	Joback Method
cpg	393.92	J/mol×K	885.07	Joback Method
cpg	402.46	J/mol×K	930.44	Joback Method
cpg	410.14	J/mol×K	975.82	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5343997&Units=SI

Legend

cpg:	Ideal gas 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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume