

9,10-Anthracenedione, 2-hydroxy-

Other names:	Anthraquinone, 2-hydroxy- 2-Hydroxy-9,10-anthraquinone 2-Hydroxyanthraquinone «beta»-Hydroxyanthraquinone
Inchi:	InChI=1S/C14H8O3/c15-8-5-6-11-12(7-8)14(17)10-4-2-1-3-9(10)13(11)16/h1-7,15H
InchiKey:	GCDBEYOJCZLKMC-UHFFFAOYSA-N
Formula:	C14H8O3
SMILES:	O=C1c2ccccc2C(=O)c2cc(O)ccc21
Mol. weight [g/mol]:	224.21
CAS:	605-32-3

Physical Properties

Property code	Value	Unit	Source
chs	-6199.40	kJ/mol	NIST Webbook
gf	-46.68	kJ/mol	Joback Method
hf	-235.58	kJ/mol	Joback Method
hfus	23.29	kJ/mol	Joback Method
hvap	74.19	kJ/mol	Joback Method
ie	8.70 ± 0.03	eV	NIST Webbook
log10ws	-3.18		Crippen Method
logp	2.168		Crippen Method
mcvol	158.750	ml/mol	McGowan Method
pc	4041.50	kPa	Joback Method
tb	806.44	K	Joback Method
tc	1086.28	K	Joback Method
tf	599.28	K	Joback Method
vc	0.549	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	498.73	J/mol×K	1039.64	Joback Method
cpg	444.26	J/mol×K	806.44	Joback Method
cpg	456.54	J/mol×K	853.08	Joback Method

cpg	468.00	J/mol×K	899.72	Joback Method
cpg	478.76	J/mol×K	946.36	Joback Method
cpg	488.96	J/mol×K	993.00	Joback Method
cpg	508.22	J/mol×K	1086.28	Joback Method
hsubt	153.10	kJ/mol	423.00	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C605323&Units=SI
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

Legend

chs:	Standard solid enthalpy of combustion
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
hsubt:	Enthalpy of sublimation at a given temperature
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

Latest version available from:

<https://www.chemeo.com/cid/13-244-6/9-10-Anthracenedione-2-hydroxy.pdf>

Generated by Cheméo on 2024-04-26 05:59:47.472194264 +0000 UTC m=+16400436.392771576.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.