

wettstein B

Inchi:	InChI=1S/C13H12O4/c1-14-10-8-5-3-4-6-9(8)11(15-2)13-12(10)16-7-17-13/h3-6H,7H2,1
InchiKey:	TYUZNCUSMBTHNZ-UHFFFAOYSA-N
Formula:	C13H12O4
SMILES:	COc1c2c(c(OC)c3ccccc13)OCO2
Mol. weight [g/mol]:	232.23
CAS:	74066-34-5

Physical Properties

Property code	Value	Unit	Source
gf	-74.66	kJ/mol	Joback Method
hf	-365.23	kJ/mol	Joback Method
hfus	34.33	kJ/mol	Joback Method
hvap	65.16	kJ/mol	Joback Method
log10ws	-3.73		Crippen Method
logp	2.586		Crippen Method
mcvol	163.430	ml/mol	McGowan Method
pc	2956.90	kPa	Joback Method
rinpol	1907.00		NIST Webbook
rinpol	1907.00		NIST Webbook
tb	672.57	K	Joback Method
tc	905.76	K	Joback Method
tf	465.25	K	Joback Method
vc	0.614	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	430.70	J/molxK	672.57	Joback Method
cpg	443.82	J/molxK	711.43	Joback Method
cpg	456.06	J/molxK	750.30	Joback Method
cpg	467.50	J/molxK	789.16	Joback Method
cpg	478.17	J/molxK	828.03	Joback Method
cpg	488.14	J/molxK	866.89	Joback Method
cpg	497.46	J/molxK	905.76	Joback Method

dvisc	0.0011242	Paxs	465.25	Joback Method
dvisc	0.0009002	Paxs	499.80	Joback Method
dvisc	0.0007419	Paxs	534.36	Joback Method
dvisc	0.0006260	Paxs	568.91	Joback Method
dvisc	0.0005385	Paxs	603.46	Joback Method
dvisc	0.0004709	Paxs	638.02	Joback Method
dvisc	0.0004175	Paxs	672.57	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=C74066345&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
rin_{pol}:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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