9H-Xanthen-9-ol, 9-phenyl-

Other names:	3-chloro-2,3-dimethylpentane
	9-Phenyl-9-xanthenol
	9-Phenylxanthen-9-ol
Inchi:	InChI=1S/C19H14O2/c20-19(14-8-2-1-3-9-14)15-10-4-6-12-17(15)21-18-13-7-5-11-16(18
InchiKey:	CVZUPKFPOSRRSK-UHFFFAOYSA-N
Formula:	C7H15Cl
SMILES:	OC1(c2ccccc2)c2ccccc2Oc2ccccc21
Mol. weight [g/mol]:	134.65
CAS:	596-38-3

Physical Properties

Property code	Value	Unit	Source
gf	271.49	kJ/mol	Joback Method
hf	61.13	kJ/mol	Joback Method
hfus	32.31	kJ/mol	Joback Method
hvap	85.82	kJ/mol	Joback Method
log10ws	-4.60		Crippen Method
logp	4.076		Crippen Method
mcvol	208.170	ml/mol	McGowan Method
pc	2934.52	kPa	Joback Method
tb	845.96	K	Joback Method
tc	1098.62	K	Joback Method
tf	540.94	K	Joback Method
vc	0.778	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	606.32	J/mol×K	845.96	Joback Method
cpg	621.15	J/mol×K	888.07	Joback Method
cpg	635.98	J/mol×K	930.18	Joback Method
cpg	651.11	J/mol×K	972.29	Joback Method
cpg	666.85	J/mol×K	1014.40	Joback Method
cpg	683.48	J/mol×K	1056.51	Joback Method

cpg	701.30	J/mol×K	1098.62	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.32451e+01
Coeff. B	-3.21672e+03
Coeff. C	-5.26700e+01
Temperature range (K), min.	300.92
Temperature range (K), max.	458.12

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=C596383&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

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
pvap: Vapor pressure
tb: Normal Boiling Point Temperature

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume