2-Chlorofluorene

Other names: Fluorene, 2-chloro-
9H-Fluorene, 2-chloro-
Inchi: InChI=1S/C13H9Cl/c14-11-5-6-13-10(8-11)7-9-3-1-2-4-12(9)13/h1-6,8H,7H2
InchiKey: FCPAQNZCCWBDSY-UHFFFAOYSA-N
Formula: C13H9Cl
SMILES: Clc1ccc2c(c1)Cc1ccccc1-2
Mol. weight [g/mol]: 200.66
CAS: 2523-44-6

Physical Properties

Property code	Value	Unit	Source
gf	335.24	kJ/mol	Joback Method
hf	216.72	kJ/mol	Joback Method
hfus	21.80	kJ/mol	Joback Method
hvap	55.33	kJ/mol	Joback Method
log10ws	-5.11		Crippen Method
logp	3.911		Crippen Method
mcvol	147.890	ml/mol	McGowan Method
pc	3181.14	kPa	Joback Method
tb	605.44	K	Joback Method
tc	857.75	K	Joback Method
tf	385.81	K	Joback Method
vc	0.571	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	330.64	J/mol×K	605.44	Joback Method
cpg	385.65	J/mol×K	815.69	Joback Method
cpg	376.34	J/mol×K	773.64	Joback Method
cpg	366.33	J/mol×K	731.59	Joback Method
cpg	355.47	J/mol×K	689.54	Joback Method
cpg	343.62	J/mol×K	647.49	Joback Method
cpg	394.38	J/mol×K	857.75	Joback Method

dvisc	0.0006489	Pa×s	605.44	Joback Method
dvisc	0.0007159	Pa×s	568.84	Joback Method
dvisc	0.0008005	Pa×s	532.23	Joback Method
dvisc	0.0009100	Pa×s	495.63	Joback Method
dvisc	0.0010559	Pa×s	459.02	Joback Method
dvisc	0.0012572	Pa×s	422.42	Joback Method
dvisc	0.0015471	Pa×s	385.81	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	418.00 ± 5.00	K	0.30	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2523446&Units=SI
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

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
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
tb: Normal Boiling Point Temperature
tbrp: Boiling point at reduced pressure

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

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