

9H-Fluorene-9-carbonitrile

Other names:	Fluorene-9-carbonitrile 9-Cyanofluorene 9-Fluorenonitrile
Inchi:	InChI=1S/C14H9N/c15-9-14-12-7-3-1-5-10(12)11-6-2-4-8-13(11)14/h1-8,14H
InchiKey:	CJVMCKCMPQEKPZ-UHFFFAOYSA-N
Formula:	C14H9N
SMILES:	N#CC1c2ccccc2-c2ccccc21
Mol. weight [g/mol]:	191.23
CAS:	1529-40-4

Physical Properties

Property code	Value	Unit	Source
gf	490.69	kJ/mol	Joback Method
hf	367.83	kJ/mol	Joback Method
hfus	23.16	kJ/mol	Joback Method
hvap	62.68	kJ/mol	Joback Method
log10ws	-4.67		Crippen Method
logp	3.322		Crippen Method
mcvol	151.120	ml/mol	McGowan Method
pc	2844.44	kPa	Joback Method
tb	683.32	K	Joback Method
tc	938.55	K	Joback Method
tf	415.39	K	Joback Method
vc	0.603	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	377.91	J/mol×K	683.32	Joback Method
cpg	390.11	J/mol×K	725.86	Joback Method
cpg	401.32	J/mol×K	768.40	Joback Method
cpg	411.67	J/mol×K	810.93	Joback Method
cpg	421.32	J/mol×K	853.47	Joback Method
cpg	430.41	J/mol×K	896.01	Joback Method

Sources

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=C1529404&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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