

Fluorene-4-carboxylic acid

Other names:	9H-Fluorene-4-carboxylic acid
Inchi:	InChI=1S/C14H10O2/c15-14(16)12-7-3-5-10-8-9-4-1-2-6-11(9)13(10)12/h1-7H,8H2,(H,1
InchiKey:	WJNBLUOXTBTGMB-UHFFFAOYSA-N
Formula:	C14H10O2
SMILES:	O=C(O)c1cccc2c1-c1cccc1C2
Mol. weight [g/mol]:	210.23
CAS:	6954-55-8

Physical Properties

Property code	Value	Unit	Source
gf	89.85	kJ/mol	Joback Method
hf	-52.99	kJ/mol	Joback Method
hfus	25.88	kJ/mol	Joback Method
hvap	76.60	kJ/mol	Joback Method
log10ws	-4.48		Crippen Method
logp	2.956		Crippen Method
mcvol	157.180	ml/mol	McGowan Method
pc	3555.77	kPa	Joback Method
tb	736.94	K	Joback Method
tc	965.57	K	Joback Method
tf	477.91	K	Joback Method
vc	0.603	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	412.56	J/molxK	736.94	Joback Method
cpg	422.77	J/molxK	775.05	Joback Method
cpg	432.30	J/molxK	813.15	Joback Method
cpg	441.25	J/molxK	851.26	Joback Method
cpg	449.72	J/molxK	889.36	Joback Method
cpg	457.83	J/molxK	927.47	Joback Method
cpg	465.68	J/molxK	965.57	Joback Method
dvisc	0.0014626	Paxs	477.91	Joback Method

dvisc	0.0008982	Paxs	521.08	Joback Method
dvisc	0.0005943	Paxs	564.25	Joback Method
dvisc	0.0004170	Paxs	607.43	Joback Method
dvisc	0.0003067	Paxs	650.60	Joback Method
dvisc	0.0002344	Paxs	693.77	Joback Method
dvisc	0.0001848	Paxs	736.94	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=C6954558&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	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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