9H-Fluorene, 9,9-dimethyl-

Other names: 9,9-Dimethylfluorene
Inchi: InChI=1S/C15H14/c1-15(2)13-9-5-3-7-11(13)12-8-4-6-10-14(12)15/h3-10H,1-2H3
InchiKey: ZHQNDEHZACHHTA-UHFFFAOYSA-N
Formula: C15H14
SMILES: CC1(C)c2ccccc2-c2ccccc21
Mol. weight [g/mol]: 194.27
CAS: 4569-45-3

Physical Properties

Property code	Value	Unit	Source
gf	360.44	kJ/mol	Joback Method
hf	197.55	kJ/mol	Joback Method
hfus	17.95	kJ/mol	Joback Method
hvap	53.28	kJ/mol	Joback Method
log10ws	-4.93		Crippen Method
logp	3.993		Crippen Method
mcvol	163.830	ml/mol	McGowan Method
pc	2767.17	kPa	Joback Method
tb	604.36	K	Joback Method
tc	851.59	K	Joback Method
tf	385.57	K	Joback Method
vc	0.630	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	401.58	J/mol×K	604.36	Joback Method
cpg	417.64	J/mol×K	645.57	Joback Method
cpg	432.50	J/mol×K	686.77	Joback Method
cpg	446.42	J/mol×K	727.98	Joback Method
cpg	459.66	J/mol×K	769.18	Joback Method
cpg	472.48	J/mol×K	810.39	Joback Method
cpg	485.15	J/mol×K	851.59	Joback Method

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=C4569453&Units=SI

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