9H-Fluorene, 2,3-dimethyl-

Other names: Fluorene, 2,3-dimethyl-
2,3-Dimethylfluorene
2,3-Dimethyl-9H-fluorene
Inchi: InChI=1S/C15H14/c1-10-7-13-9-12-5-3-4-6-14(12)15(13)8-11(10)2/h3-8H,9H2,1-2H3
InchiKey: WZKBKKCKPZMGHV-UHFFFAOYSA-N
Formula: C15H14
SMILES: Cc1cc2c(cc1C)-c1ccccc1C2
Mol. weight [g/mol]: 194.27
CAS: 4612-63-9

Physical Properties

Property code	Value	Unit	Source
gf	354.38	kJ/mol	Joback Method
hf	179.71	kJ/mol	Joback Method
hfus	22.40	kJ/mol	Joback Method
hvap	56.06	kJ/mol	Joback Method
log10ws	-5.37		Crippen Method
logp	3.875		Crippen Method
mcvol	163.830	ml/mol	McGowan Method
pc	2648.83	kPa	Joback Method
rinpol	307.30		NIST Webbook
rinpol	300.04		NIST Webbook
rinpol	307.30		NIST Webbook
tb	618.75	K	Joback Method
tc	858.02	K	Joback Method
tf	390.95	K	Joback Method
vc	0.633	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	400.47	J/mol×K	618.75	Joback Method
cpg	467.17	J/mol×K	818.14	Joback Method
cpg	455.59	J/mol×K	778.26	Joback Method

cpg	443.25	J/mol×K	738.38	Joback Method
cpg	430.02	J/mol×K	698.51	Joback Method
cpg	415.80	J/mol×K	658.63	Joback Method
cpg	478.10	J/mol×K	858.02	Joback Method
dvisc	0.0005695	Pa×s	618.75	Joback Method
dvisc	0.0006256	Pa×s	580.78	Joback Method
dvisc	0.0006964	Pa×s	542.82	Joback Method
dvisc	0.0007878	Pa×s	504.85	Joback Method
dvisc	0.0009092	Pa×s	466.88	Joback Method
dvisc	0.0010762	Pa×s	428.92	Joback Method
dvisc	0.0013164	Pa×s	390.95	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=C4612639&Units=SI

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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume