9H-Fluorene, 9-methylene-

Other names: 9-Methylene-fluorene
9-Methylene-9H-fluorene
Inchi: InChI=1S/C14H10/c1-10-11-6-2-4-8-13(11)14-9-5-3-7-12(10)14/h2-9H,1H2
InchiKey: ZYASLTYCYTYKFC-UHFFFAOYSA-N
Formula: C14H10
SMILES: C=C1c2ccccc2-c2ccccc21
Mol. weight [g/mol]: 178.23
CAS: 4425-82-5

Physical Properties

Property code	Value	Unit	Source
gf	418.30	kJ/mol	Joback Method
hf	307.53	kJ/mol	Joback Method
hfus	19.43	kJ/mol	Joback Method
hvap	52.67	kJ/mol	Joback Method
log10ws	-4.86		Crippen Method
logp	3.728		Crippen Method
mcvol	145.440	ml/mol	McGowan Method
pc	3093.29	kPa	Joback Method
rinpol	292.28		NIST Webbook
rinpol	292.40		NIST Webbook
rinpol	279.30		NIST Webbook
rinpol	292.28		NIST Webbook
rinpol	292.40		NIST Webbook
tb	585.07	K	Joback Method
tc	829.67	K	Joback Method
tf	368.32	K	Joback Method
vc	0.561	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	332.55	J/mol×K	585.07	Joback Method
cpg	346.48	J/mol×K	625.84	Joback Method

cpg	359.24	J/mol×K	666.60	Joback Method
cpg	370.96	J/mol×K	707.37	Joback Method
cpg	381.76	J/mol×K	748.14	Joback Method
cpg	391.79	J/mol×K	788.90	Joback Method
cpg	401.16	J/mol×K	829.67	Joback Method
dvisc	0.0013750	Pa×s	368.32	Joback Method
dvisc	0.0011475	Pa×s	404.45	Joback Method
dvisc	0.0009865	Pa×s	440.57	Joback Method
dvisc	0.0008677	Pa×s	476.70	Joback Method
dvisc	0.0007772	Pa×s	512.82	Joback Method
dvisc	0.0007063	Pa×s	548.95	Joback Method
dvisc	0.0006495	Pa×s	585.07	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=C4425825&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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