7H-Benzo[c]fluorene

Other names: Benzo[c]fluorene
3,4-Benzofluorene
Inchi: InChI=1S/C17H12/c1-3-7-15-12(5-1)9-10-14-11-13-6-2-4-8-16(13)17(14)15/h1-10H,11H2
InchiKey: FRIJWEQBTIZQMD-UHFFFAOYSA-N
Formula: C17H12
SMILES: c1ccc2c(c1)Cc1ccc3ccccc3c1-2
Mol. weight [g/mol]: 216.28
CAS: 205-12-9

Physical Properties

Property code	Value	Unit	Source
gf	487.50	kJ/mol	Joback Method
hf	340.97	kJ/mol	Joback Method
hfus	24.98	kJ/mol	Joback Method
hvap	61.49	kJ/mol	Joback Method
log10ws	-6.23		Crippen Method
logp	4.411		Crippen Method
mcvol	172.550	ml/mol	McGowan Method
pc	2844.44	kPa	Joback Method
rinpol	2236.00		NIST Webbook
rinpol	2195.00		NIST Webbook
rinpol	2236.00		NIST Webbook
rinpol	2236.00		NIST Webbook
rinpol	391.39		NIST Webbook
rinpol	366.11		NIST Webbook
rinpol	367.32		NIST Webbook
rinpol	391.39		NIST Webbook
rinpol	2236.00		NIST Webbook
rinpol	2244.00		NIST Webbook
rinpol	391.33		NIST Webbook
tb	678.51	K	Joback Method
tc	937.21	K	Joback Method
tf	433.67	K	Joback Method
vc	0.667	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	438.86	J/mol×K	678.51	Joback Method
cpg	502.61	J/mol×K	894.10	Joback Method
cpg	491.43	J/mol×K	850.98	Joback Method
cpg	479.68	J/mol×K	807.86	Joback Method
cpg	467.14	J/mol×K	764.74	Joback Method
cpg	453.60	J/mol×K	721.63	Joback Method
cpg	513.42	J/mol×K	937.21	Joback Method
dvisc	0.0009629	Pa×s	678.51	Joback Method
dvisc	0.0010415	Pa×s	637.70	Joback Method
dvisc	0.0011386	Pa×s	596.90	Joback Method
dvisc	0.0012612	Pa×s	556.09	Joback Method
dvisc	0.0014198	Pa×s	515.28	Joback Method
dvisc	0.0016313	Pa×s	474.48	Joback Method
dvisc	0.0019238	Pa×s	433.67	Joback Method

Sources

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=C205129&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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