9H-Fluorene, 2-bromo-

Other names: 2-Bromofluorene
2-bromo-9H-fluorene
Inchi: InChI=1S/C13H9Br/c14-11-5-6-13-10(8-11)7-9-3-1-2-4-12(9)13/h1-6,8H,7H2
InchiKey: FXSCJZNMWILAJO-UHFFFAOYSA-N
Formula: C13H9Br
SMILES: Brc1ccc2c(c1)Cc1ccccc1-2
Mol. weight [g/mol]: 245.12
CAS: 1133-80-8

Physical Properties

Property code	Value	Unit	Source
gf	361.49	kJ/mol	Joback Method
hf	258.79	kJ/mol	Joback Method
hfus	22.89	kJ/mol	Joback Method
hvap	57.38	kJ/mol	Joback Method
log10ws	-5.58		Crippen Method
logp	4.020		Crippen Method
mcvol	153.150	ml/mol	McGowan Method
pc	3598.56	kPa	Joback Method
tb	634.17	K	Joback Method
tc	896.09	K	Joback Method
tf	415.69	K	Joback Method
vc	0.584	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	340.74	J/mol×K	634.17	Joback Method
cpg	393.86	J/mol×K	852.44	Joback Method
cpg	384.77	J/mol×K	808.78	Joback Method
cpg	375.09	J/mol×K	765.13	Joback Method
cpg	364.63	J/mol×K	721.48	Joback Method
cpg	353.24	J/mol×K	677.82	Joback Method
cpg	402.53	J/mol×K	896.09	Joback Method

dvisc	0.0007071	Pa×s	634.17	Joback Method
dvisc	0.0007812	Pa×s	597.76	Joback Method
dvisc	0.0008743	Pa×s	561.34	Joback Method
dvisc	0.0009939	Pa×s	524.93	Joback Method
dvisc	0.0011517	Pa×s	488.52	Joback Method
dvisc	0.0013665	Pa×s	452.10	Joback Method
dvisc	0.0016708	Pa×s	415.69	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	458.20	K	18.00	NIST Webbook
tbrp	431.50 ± 1.50	K	0.10	NIST Webbook

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=C1133808&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
tb: Normal Boiling Point Temperature

tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume