Fluoranthene, hexadecahydro-

Other names: Hexadecahydrofluoranthene
Perhydrofluoranthene
Inchi: InChI=1S/C16H26/c1-2-8-13-12(7-1)14-9-3-5-11-6-4-10-15(13)16(11)14/h11-16H,1-10H2
InchiKey: FEBHUAJIEVOXIJ-UHFFFAOYSA-N
Formula: C16H26
SMILES: C1CCC2C(C1)C1CCCC3CCCC2C31
Mol. weight [g/mol]: 218.38
CAS: 16832-35-2

Physical Properties

Property code	Value	Unit	Source
gf	263.02	kJ/mol	Joback Method
hf	-147.69	kJ/mol	Joback Method
hfus	23.48	kJ/mol	Joback Method
hvap	50.93	kJ/mol	Joback Method
log10ws	-4.65		Crippen Method
logp	4.639		Crippen Method
mcvol	192.860	ml/mol	McGowan Method
pc	2066.12	kPa	Joback Method
tb	600.18	K	Joback Method
tc	832.27	K	Joback Method
tf	319.28	K	Joback Method
vc	0.726	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	571.83	J/mol×K	600.18	Joback Method
cpg	599.84	J/mol×K	638.86	Joback Method
cpg	625.86	J/mol×K	677.54	Joback Method
cpg	650.04	J/mol×K	716.22	Joback Method
cpg	672.51	J/mol×K	754.90	Joback Method
cpg	693.41	J/mol×K	793.58	Joback Method
cpg	712.88	J/mol×K	832.27	Joback Method

dvisc	0.0026326	Pa×s	319.28	Joback Method
dvisc	0.0025174	Pa×s	366.10	Joback Method
dvisc	0.0024318	Pa×s	412.91	Joback Method
dvisc	0.0023657	Pa×s	459.73	Joback Method
dvisc	0.0023131	Pa×s	506.55	Joback Method
dvisc	0.0022704	Pa×s	553.36	Joback Method
dvisc	0.0022349	Pa×s	600.18	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=C16832352&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume