

Fluoranthene, 2-methyl-

Other names:	2-Methylfluoranthene
Inchi:	InChI=1S/C17H12/c1-11-9-12-5-4-8-15-13-6-2-3-7-14(13)16(10-11)17(12)15/h2-10H,1H3
InchiKey:	VVRCMNWZFPMXQZ-UHFFFAOYSA-N
Formula:	C17H12
SMILES:	<chem>Cc1cc2c3c(cccc3c1)-c1cccc1-2</chem>
Mol. weight [g/mol]:	216.28
CAS:	33543-31-6

Physical Properties

Property code	Value	Unit	Source
gf	489.97	kJ/mol	Joback Method
hf	335.66	kJ/mol	Joback Method
hfus	26.70	kJ/mol	Joback Method
hvap	61.98	kJ/mol	Joback Method
log10ws	-7.20		Crippen Method
logp	4.796		Crippen Method
mcvol	172.550	ml/mol	McGowan Method
pc	2726.86	kPa	Joback Method
rinpol	362.09		NIST Webbook
rinpol	362.09		NIST Webbook
tb	679.22	K	Joback Method
tc	930.34	K	Joback Method
tf	449.71	K	Joback Method
vc	0.675	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	435.75	J/molxK	679.22	Joback Method
cpg	449.48	J/molxK	721.07	Joback Method
cpg	462.19	J/molxK	762.93	Joback Method
cpg	474.06	J/molxK	804.78	Joback Method
cpg	485.29	J/molxK	846.63	Joback Method
cpg	496.08	J/molxK	888.49	Joback Method

cpg	506.62	J/mol×K	930.34	Joback Method
dvisc	0.0019946	Paxs	449.71	Joback Method
dvisc	0.0018069	Paxs	487.96	Joback Method
dvisc	0.0016605	Paxs	526.21	Joback Method
dvisc	0.0015435	Paxs	564.47	Joback Method
dvisc	0.0014482	Paxs	602.72	Joback Method
dvisc	0.0013691	Paxs	640.97	Joback Method
dvisc	0.0013026	Paxs	679.22	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.43521e+01
Coeff. B	-5.25038e+03
Coeff. C	-1.30454e+02
Temperature range (K), min.	503.76
Temperature range (K), max.	711.21

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C33543316&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

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

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