Fluorene

Other names:	2,2'-METHYLENEBIPHENYL
	2,3-Benzindene
	9H-FLUORENE
	DIPHENYLENEMETHANE
	Methane, diphenylene-
	o-Biphenylenemethane
	o-Biphenylmethane
Inchi:	InChI=1S/C13H10/c1-3-7-12-10(5-1)9-11-6-2-4-8-13(11)12/h1-8H,9H2
InchiKey:	NIHNNTQXNPWCJQ-UHFFFAOYSA-N
Formula:	C13H10
SMILES:	c1ccc2c(c1)Cc1ccccc1-2
Mol. weight [g/mol]:	166.22
CAS:	86-73-7

Physical Properties

Property code	Value	Unit	Source
affp	828.00	kJ/mol	NIST Webbook
affp	831.50	kJ/mol	NIST Webbook
basg	800.80	kJ/mol	NIST Webbook
basg	803.80	kJ/mol	NIST Webbook
chs	-6631.50 ± 4.00	kJ/mol	NIST Webbook
chs	-6634.60 ± 1.10	kJ/mol	NIST Webbook
ea	0.28 ± 0.03	eV	NIST Webbook
gf	356.80	kJ/mol	Joback Method
hf	166.90 ± 4.10	kJ/mol	NIST Webbook
hf	175.00 ± 1.50	kJ/mol	NIST Webbook
hf	176.70 ± 3.10	kJ/mol	NIST Webbook
hfs	89.90 ± 1.40	kJ/mol	NIST Webbook
hfs	86.70 ± 4.10	kJ/mol	NIST Webbook
hfs	90.20 ± 2.80	kJ/mol	NIST Webbook
hfus	17.99	kJ/mol	Joback Method
hvap	72.40 ± 1.70	kJ/mol	NIST Webbook
hvap	74.40 ± 1.20	kJ/mol	NIST Webbook
hvap	72.30	kJ/mol	NIST Webbook
hvap	72.20	kJ/mol	NIST Webbook
hvap	65.70	kJ/mol	NIST Webbook
ie	7.89 ± 0.03	eV	NIST Webbook

ie	7.78	eV	NIST Webbook
ie	8.42	eV	NIST Webbook
ie	7.93 ± 0.01	eV	NIST Webbook
ie	7.91	eV	NIST Webbook
ie	7.93 ± 0.02	eV	NIST Webbook
ie	8.52	eV	NIST Webbook
ie	7.88 ± 0.05	eV	NIST Webbook
ie	7.91 ± 0.02	eV	NIST Webbook
log10ws	-4.97		Aqueous Solubility Prediction Method
log10ws	-5.00		Estimated Solubility Method
log10ws	-4.92		Aqueous and cosolvent solubility data for drug-like organic compounds
logp	3.258		Crippen Method
mcvol	135.650	ml/mol	McGowan Method
pc	3376.28	kPa	Joback Method
rinpol	1574.00		NIST Webbook
rinpol	268.17		NIST Webbook
rinpol	267.53		NIST Webbook
rinpol	269.70		NIST Webbook
rinpol	270.00		NIST Webbook
rinpol	269.70		NIST Webbook
rinpol	270.80		NIST Webbook
rinpol	268.17		NIST Webbook
rinpol	267.39		NIST Webbook
rinpol	268.17		NIST Webbook
rinpol	1580.00		NIST Webbook
rinpol	1583.40		NIST Webbook
rinpol	1587.90		NIST Webbook
rinpol	1579.50		NIST Webbook
rinpol	1577.83		NIST Webbook
rinpol	1590.56		NIST Webbook
rinpol	1555.87		NIST Webbook
rinpol	270.10		NIST Webbook
rinpol	1597.00		NIST Webbook
rinpol	1557.00		NIST Webbook
rinpol	1557.00		NIST Webbook
rinpol	269.22		NIST Webbook
rinpol	1595.00		NIST Webbook
rinpol	1535.00		NIST Webbook
rinpol	1585.00		NIST Webbook
rinpol	1552.10		NIST Webbook
rinpol	1561.00		NIST Webbook
rinpol	1609.00		NIST Webbook

rinpol	1580.00	NIST Webbook
rinpol	1583.40	NIST Webbook
rinpol	1579.50	NIST Webbook
rinpol	1578.90	NIST Webbook
rinpol	1565.20	NIST Webbook
rinpol	1579.50	NIST Webbook
rinpol	1587.90	NIST Webbook
rinpol	1590.50	NIST Webbook
rinpol	1611.00	NIST Webbook
rinpol	1595.00	NIST Webbook
rinpol	1565.20	NIST Webbook
rinpol	1579.50	NIST Webbook
rinpol	1587.90	NIST Webbook
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rinpol	1578.90	NIST Webbook
rinpol	1574.59	NIST Webbook
rinpol	1577.83	NIST Webbook
rinpol	1580.72	NIST Webbook
rinpol	1593.30	NIST Webbook
rinpol	1589.39	NIST Webbook
rinpol	1595.90	NIST Webbook
rinpol	1590.56	NIST Webbook
rinpol	1594.00	NIST Webbook
rinpol	1583.00	NIST Webbook
rinpol	1587.00	NIST Webbook
rinpol	1555.00	NIST Webbook
rinpol	1555.87	NIST Webbook
rinpol	1549.28	NIST Webbook
rinpol	1555.00	NIST Webbook
rinpol	1552.98	NIST Webbook
rinpol	1586.39	NIST Webbook
rinpol	1604.00	NIST Webbook
rinpol	1568.00	NIST Webbook
rinpol	1548.00	NIST Webbook
rinpol	1563.00	NIST Webbook
rinpol	1552.00	NIST Webbook
rinpol	1542.00	NIST Webbook
rinpol	1544.00	NIST Webbook
rinpol	1617.00	NIST Webbook
rinpol	1558.00	NIST Webbook
rinpol	1580.00	NIST Webbook
rinpol	1587.00	NIST Webbook
rinpol	1598.00	NIST Webbook
rinpol	1593.00	NIST Webbook

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rinpol	1581.00	NIST Webbook
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rinpol	1583.00	NIST Webbook
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rinpol	268.17	NIST Webbook
rinpol	1592.00	NIST Webbook
rinpol	1558.00	NIST Webbook
rinpol	1559.00	NIST Webbook
rinpol	1531.00	NIST Webbook
rinpol	1572.00	NIST Webbook
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rinpol	1562.00	NIST Webbook
rinpol	1582.00	NIST Webbook
rinpol	1584.00	NIST Webbook
rinpol	1563.00	NIST Webbook
rinpol	1559.00	NIST Webbook
rinpol	1593.00	NIST Webbook
rinpol	1594.00	NIST Webbook
rinpol	1547.00	NIST Webbook
rinpol	1580.00	NIST Webbook
rinpol	270.24	NIST Webbook
rinpol	270.10	NIST Webbook
rinpol	270.80	NIST Webbook
rinpol	271.00	NIST Webbook
rinpol	268.17	NIST Webbook
rinpol	269.60	NIST Webbook
rinpol	270.32	NIST Webbook
rinpol	269.94	NIST Webbook
rinpol	269.94	NIST Webbook
rinpol	270.57	NIST Webbook
rinpol	270.28	NIST Webbook
rinpol	270.23	NIST Webbook
rinpol	270.16	NIST Webbook
rinpol	270.24	NIST Webbook
rinpol	270.26	NIST Webbook
rinpol	270.30	NIST Webbook
rinpol	270.58	NIST Webbook
rinpol	270.66	NIST Webbook
rinpol	270.68	NIST Webbook
rinpol	270.73	NIST Webbook
rinpol	270.01	NIST Webbook

rinpol	270.32	NIST Webbook
rinpol	268.20	NIST Webbook
rinpol	268.20	NIST Webbook
rinpol	270.49	NIST Webbook
rinpol	269.55	NIST Webbook
rinpol	267.40	NIST Webbook
rinpol	269.92	NIST Webbook
rinpol	268.37	NIST Webbook
rinpol	270.18	NIST Webbook
rinpol	270.30	NIST Webbook
rinpol	270.40	NIST Webbook
rinpol	269.90	NIST Webbook
rinpol	270.00	NIST Webbook
rinpol	268.23	NIST Webbook
rinpol	267.45	NIST Webbook
rinpol	269.94	NIST Webbook
rinpol	268.17	NIST Webbook
rinpol	270.77	NIST Webbook
rinpol	267.04	NIST Webbook
rinpol	266.20	NIST Webbook
rinpol	269.73	NIST Webbook
rinpol	268.17	NIST Webbook
rinpol	270.60	NIST Webbook
rinpol	270.39	NIST Webbook
rinpol	269.94	NIST Webbook
rinpol	270.39	NIST Webbook
rinpol	270.30	NIST Webbook
rinpol	269.83	NIST Webbook
rinpol	262.00	NIST Webbook
rinpol	262.11	NIST Webbook
rinpol	268.20	NIST Webbook
rinpol	269.40	NIST Webbook
rinpol	269.60	NIST Webbook
rinpol	269.60	NIST Webbook
rinpol	262.04	NIST Webbook
rinpol	262.11	NIST Webbook
rinpol	267.70	NIST Webbook
rinpol	268.18	NIST Webbook
rinpol	1591.00	NIST Webbook
rinpol	269.73	NIST Webbook
rinpol	267.19	NIST Webbook
ripol	2374.00	NIST Webbook
ripol	264.34	NIST Webbook
ripol	2311.00	NIST Webbook

ripol	2331.00		NIST Webbook
ripol	2322.00		NIST Webbook
ripol	2322.00		NIST Webbook
ripol	2328.00		NIST Webbook
ripol	2338.00		NIST Webbook
ripol	2337.00		NIST Webbook
ripol	2337.00		NIST Webbook
ss	207.32	J/mol×K	NIST Webbook
tb	571.20	K	NIST Webbook
tb	386.35	K	KDB
tb	567.20	K	NIST Webbook
tb	569.55 ± 0.50	K	NIST Webbook
tc	836.00	K	Critical point measurement of some polycyclic aromatic hydrocarbons
tf	388.15 ± 1.00	K	NIST Webbook
tf	390.00 ± 1.50	K	NIST Webbook
tf	388.10 ± 0.30	K	NIST Webbook
tf	390.20 ± 1.50	K	NIST Webbook
tf	389.40 ± 3.00	K	NIST Webbook
tf	385.60 ± 0.30	K	NIST Webbook
tf	389.00 ± 0.30	K	NIST Webbook
tf	388.00 ± 2.00	K	NIST Webbook
tf	387.90 ± 0.30	K	NIST Webbook
tf	389.15	K	Solubility of Fluorene in Different Solvents from 278.98 K to 338.35 K
tf	388.00	K	Fluorene: An extended experimental thermodynamic study
tf	387.53	K	Solid-liquid equilibrium of some polycyclic aromatic hydrocarbons in wash oil
tf	388.19	K	Aqueous Solubility Prediction Method
tf	387.00 ± 0.20	K	NIST Webbook
tf	387.00 ± 2.00	K	NIST Webbook
tf	387.00 ± 2.00	K	NIST Webbook
tf	387.35 ± 0.50	K	NIST Webbook
tt	387.94 ± 0.02	K	NIST Webbook
tt	387.94 ± 0.02	K	NIST Webbook
tt	355.51 ± 0.03	K	NIST Webbook
vc	0.521	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	346.90	J/mol×K	686.85	Joback Method
cpg	306.80	J/mol×K	563.03	Joback Method
cpg	321.41	J/mol×K	604.30	Joback Method
cpg	334.73	J/mol×K	645.58	Joback Method
cpg	358.06	J/mol×K	728.13	Joback Method
cpg	368.35	J/mol×K	769.40	Joback Method
cpg	377.92	J/mol×K	810.68	Joback Method
cps	257.25	J/mol×K	355.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	257.17	J/mol×K	355.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	251.68	J/mol×K	350.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	251.76	J/mol×K	350.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	251.85	J/mol×K	350.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	246.61	J/mol×K	345.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	257.08	J/mol×K	355.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene

cps	261.08	J/mol×K	358.37	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	
cps	261.32	J/mol×K	358.50	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	
cps	242.04	J/mol×K	340.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	
cps	179.93	J/mol×K	275.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	
cps	261.24	J/mol×K	358.50	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	
cps	203.13	J/mol×K	298.15	NIST Webbook	
cps	189.50	J/mol×K	298.10	NIST Webbook	
cps	246.61	J/mol×K	345.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	
cps	246.77	J/mol×K	345.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	
cps	171.44	J/mol×K	262.36	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	
cps	171.61	J/mol×K	262.44	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene	

cps	171.61	J/mol×K	262.47	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	173.52	J/mol×K	265.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	173.36	J/mol×K	265.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	173.36	J/mol×K	265.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	176.77	J/mol×K	270.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	176.68	J/mol×K	270.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	176.68	J/mol×K	270.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	180.09	J/mol×K	275.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	180.01	J/mol×K	275.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	241.87	J/mol×K	340.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene

cps	183.33	J/mol×K	280.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	183.25	J/mol×K	280.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	183.25	J/mol×K	280.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	186.49	J/mol×K	285.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	186.41	J/mol×K	285.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	186.33	J/mol×K	285.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	189.65	J/mol×K	290.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	189.49	J/mol×K	290.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	189.40	J/mol×K	290.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	192.90	J/mol×K	295.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene

cps	192.81	J/mol×K	295.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	192.73	J/mol×K	295.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	196.47	J/mol×K	300.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	196.47	J/mol×K	300.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	196.31	J/mol×K	300.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	201.38	J/mol×K	305.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	201.38	J/mol×K	305.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	201.21	J/mol×K	305.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	208.11	J/mol×K	310.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	208.20	J/mol×K	310.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene

cps	207.95	J/mol×K	310.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	216.18	J/mol×K	315.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	216.34	J/mol×K	315.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	216.09	J/mol×K	315.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	223.33	J/mol×K	320.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	223.66	J/mol×K	320.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	223.41	J/mol×K	320.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	227.90	J/mol×K	325.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	228.32	J/mol×K	325.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	228.32	J/mol×K	325.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene

cps	231.81	J/mol×K	330.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	232.39	J/mol×K	330.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	232.31	J/mol×K	330.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	236.96	J/mol×K	335.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	237.30	J/mol×K	335.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	237.21	J/mol×K	335.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
cps	241.87	J/mol×K	340.00	Recommended vapor pressures for acenaphthylene, fluoranthene, and fluorene
dvisc	0.0011839	Pa×s	379.98	Joback Method
dvisc	0.0007367	Pa×s	489.81	Joback Method
dvisc	0.0009831	Pa×s	416.59	Joback Method
dvisc	0.0005951	Pa×s	563.03	Joback Method
dvisc	0.0008412	Pa×s	453.20	Joback Method
dvisc	0.0014835	Pa×s	343.37	Joback Method
dvisc	0.0006572	Pa×s	526.42	Joback Method
hfust	19.10	kJ/mol	387.70	NIST Webbook
hfust	19.87	kJ/mol	387.00	NIST Webbook
hfust	19.58	kJ/mol	387.90	NIST Webbook
hfust	19.58	kJ/mol	387.90	NIST Webbook
hsubt	78.90	kJ/mol	368.00	NIST Webbook
hsubt	81.80	kJ/mol	388.00	NIST Webbook
hsubt	80.30 ± 0.80	kJ/mol	293.00	NIST Webbook

hsubt	82.80	kJ/mol	314.00	NIST Webbook
hsubt	82.80	kJ/mol	314.50	NIST Webbook
hsubt	87.00 ± 1.00	kJ/mol	325.50	NIST Webbook
hsubt	88.40 ± 0.60	kJ/mol	303.00	NIST Webbook
hsubt	83.20	kJ/mol	327.50	NIST Webbook
hsubt	92.20	kJ/mol	320.50	NIST Webbook
hsubt	84.90	kJ/mol	383.00	NIST Webbook
hsubt	84.90 ± 0.40	kJ/mol	343.00	NIST Webbook
hsubt	83.10 ± 1.30	kJ/mol	369.00	NIST Webbook
hsubt	82.84	kJ/mol	306.30	NIST Webbook
hvapt	66.90	kJ/mol	398.00	NIST Webbook
hvapt	56.60	kJ/mol	498.00	NIST Webbook
hvapt	54.20	kJ/mol	485.00	NIST Webbook
hvapt	63.30	kJ/mol	405.00	NIST Webbook
psub	5.81e-04	kPa	317.30	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method
psub	8.40e-05	kPa	299.80	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method
psub	1.27e-03	kPa	324.40	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method
psub	7.60e-04	kPa	320.30	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method

psub	6.61e-05	kPa	298.00	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	6.52e-05	kPa	298.10	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	6.13e-04	kPa	317.60	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	9.88e-05	kPa	301.40	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	1.41e-04	kPa	304.30	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	1.78e-04	kPa	306.60	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	1.95e-04	kPa	306.90	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	

psub	2.18e-04	kPa	308.10	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	2.61e-04	kPa	309.80	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	3.01e-04	kPa	311.20	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	4.14e-04	kPa	314.30	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	4.60e-04	kPa	316.00	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
psub	5.31e-04	kPa	316.50	Vapor Pressures and Enthalpies of Sublimation of Ten Polycyclic Aromatic Hydrocarbons Determined via the Knudsen Effusion Method	
pvap	4.63e-04	kPa	298.15	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons	

pvap	5.52e-04	kPa	300.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	16.14	kPa	500.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	20.71	kPa	510.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	12.39	kPa	490.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	9.37	kPa	480.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	6.96	kPa	470.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	3.64	kPa	450.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons

pvap	2.55	kPa	440.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	1.75	kPa	430.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	1.17	kPa	420.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	0.76	kPa	410.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	0.48	kPa	400.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	0.30	kPa	390.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	0.18	kPa	380.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons

pvap	0.10	kPa	370.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	0.06	kPa	360.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	0.03	kPa	350.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	0.01	kPa	340.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	7.07e-03	kPa	330.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	3.21e-03	kPa	320.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
pvap	1.37e-03	kPa	310.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons

pvap	5.08	kPa	460.00	Hypothetical Thermodynamic Properties. Subcooled Vaporization Enthalpies and Vapor Pressures of Polyaromatic Hydrocarbons
sfust	51.30	J/mol×K	387.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.48211e+01
Coeff. B	-5.26077e+03
Coeff. C	-5.55750e+01
Temperature range (K), min.	417.55
Temperature range (K), max.	608.78

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2
Coeff. A	7.33490e+01
Coeff. B	-1.04673e+04
Coeff. C	-8.04407e+00
Coeff. D	2.07264e-06
Temperature range (K), min.	387.15
Temperature range (K), max.	870.00

Sources

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Solid-liquid equilibrium of some polycyclic aromatic hydrocarbons in wash oil:	https://www.doi.org/10.1016/j.fluid.2012.01.031

Legend

affp:	Proton affinity
basg:	Gas basicity
chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
cps:	Solid phase heat capacity
dvisc:	Dynamic viscosity
ea:	Electron affinity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hsubt:	Enthalpy of sublimation at a given temperature
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
psub:	Sublimation pressure
pvap:	Vapor pressure

rinpol:	Non-polar retention indices
ripol:	Polar retention indices
sfust:	Entropy of fusion at a given temperature
ss:	Solid phase molar entropy at standard conditions
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume