Benzo[ghi]fluoranthene

Other names:	Benzo[mno]fluoranthene
	Benzofluoranthene
	1,10-Benzofluoranthrene
	1,12-Benzfluoranthene
	Benz-(m,n,o)-fluoranthene
Inchi:	InChI=1S/C18H10/c1-3-11-7-9-13-10-8-12-4-2-6-15-14(5-1)16(11)18(13)17(12)15/h1-10
InchiKey:	YEIHPPOCKIHUQJ-UHFFFAOYSA-N
Formula:	C18H10
SMILES:	c1cc2c3c(c1)ccc1ccc4cccc-2c4c13
Mol. weight [g/mol]:	226.27
CAS:	203-12-3

Physical Properties

Property code	Value	Unit	Source
gf	599.28	kJ/mol	Joback Method
hf	460.63	kJ/mol	Joback Method
hfus	29.28	kJ/mol	Joback Method
hvap	65.21	kJ/mol	Joback Method
log10ws	-7.73		Crippen Method
logp	5.127		Crippen Method
mcvol	171.480	ml/mol	McGowan Method
pc	2915.53	kPa	Joback Method
rinpol	393.40		NIST Webbook
rinpol	391.95		NIST Webbook
rinpol	389.60		NIST Webbook
rinpol	390.90		NIST Webbook
rinpol	391.02		NIST Webbook
rinpol	390.28		NIST Webbook
rinpol	390.83		NIST Webbook
rinpol	390.85		NIST Webbook
rinpol	390.61		NIST Webbook
rinpol	390.90		NIST Webbook
rinpol	390.28		NIST Webbook
rinpol	390.63		NIST Webbook
rinpol	391.06		NIST Webbook
rinpol	389.92		NIST Webbook
rinpol	389.60		NIST Webbook

rinpol	390.18	NIST Webbook
rinpol	389.92	NIST Webbook
rinpol	390.18	NIST Webbook
rinpol	390.28	NIST Webbook
rinpol	389.60	NIST Webbook
rinpol	388.20	NIST Webbook
rinpol	389.69	NIST Webbook
rinpol	389.60	NIST Webbook
rinpol	389.60	NIST Webbook
rinpol	390.90	NIST Webbook
rinpol	391.10	NIST Webbook
rinpol	390.90	NIST Webbook
rinpol	389.67	NIST Webbook
rinpol	390.50	NIST Webbook
rinpol	388.58	NIST Webbook
rinpol	389.64	NIST Webbook
rinpol	389.60	NIST Webbook
rinpol	389.60	NIST Webbook
rinpol	391.21	NIST Webbook
rinpol	391.41	NIST Webbook
rinpol	391.60	NIST Webbook
rinpol	389.60	NIST Webbook
rinpol	385.75	NIST Webbook
rinpol	389.11	NIST Webbook
rinpol	389.60	NIST Webbook
rinpol	389.97	NIST Webbook
rinpol	391.00	NIST Webbook
rinpol	390.43	NIST Webbook
rinpol	390.18	NIST Webbook
rinpol	388.20	NIST Webbook
rinpol	391.10	NIST Webbook
rinpol	389.64	NIST Webbook
rinpol	391.60	NIST Webbook
rinpol	389.97	NIST Webbook
rinpol	390.43	NIST Webbook
rinpol	390.83	NIST Webbook
rinpol	390.63	NIST Webbook
rinpol	2431.50	NIST Webbook
rinpol	2438.00	NIST Webbook
rinpol	2410.80	NIST Webbook
rinpol	2431.50	NIST Webbook
rinpol	2438.00	NIST Webbook
rinpol	390.00	NIST Webbook
rinpol	390.96	NIST Webbook

rinpol	390.00		NIST Webbook
tb	713.38	K	Joback Method
tc	970.65	K	Joback Method
tf	424.40 ± 0.40	K	NIST Webbook
vc	0.683	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	483.28	J/mol×K	884.89	Joback Method
cpg	462.05	J/mol×K	799.14	Joback Method
cpg	450.85	J/mol×K	756.26	Joback Method
cpg	438.90	J/mol×K	713.38	Joback Method
cpg	493.87	J/mol×K	927.77	Joback Method
cpg	504.82	J/mol×K	970.65	Joback Method
cpg	472.76	J/mol×K	842.01	Joback Method
dvisc	0.0043262	Pa×s	535.53	Joback Method
dvisc	0.0043098	Pa×s	571.10	Joback Method
dvisc	0.0042953	Pa×s	606.67	Joback Method
dvisc	0.0042825	Pa×s	642.24	Joback Method
dvisc	0.0042710	Pa×s	677.81	Joback Method
dvisc	0.0043451	Pa×s	499.96	Joback Method
dvisc	0.0042607	Pa×s	713.38	Joback Method
hfust	0.88	kJ/mol	402.10	NIST Webbook
hfust	5.35	kJ/mol	402.80	NIST Webbook
hfust	11.80	kJ/mol	424.00	NIST Webbook
hfust	11.80	kJ/mol	424.00	NIST Webbook
hfust	0.44	kJ/mol	352.70	NIST Webbook
sfust	13.28	J/mol×K	402.80	NIST Webbook
sfust	27.83	J/mol×K	424.00	NIST Webbook
sfust	1.23	J/mol×K	352.70	NIST Webbook
sfust	2.19	J/mol×K	402.10	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C203123&Units=SI

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

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
hfust:	Enthalpy of fusion at a given temperature
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
sfust:	Entropy of fusion at a given temperature
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

https://www.chemeo.com/cid/35-870-7/Benzo-ghi-fluoranthene.pdf

Generated by Cheméo on 2024-04-25 20:04:47.263328315 +0000 UTC m=+16364736.183905627.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.