Acephenanthrylene

Other names:	benz [e] acenaphthylene
	Acephenanthrene
Inchi:	InChI=1S/C16H10/c1-2-6-14-12(4-1)10-13-9-8-11-5-3-7-15(14)16(11)13/h1-10H
InchiKey:	SQFPKRNUGBRTAR-UHFFFAOYSA-N
Formula:	C16H10
SMILES:	C1=Cc2cc3ccccc3c3cccc1c23
Mol. weight [g/mol]:	202.25
CAS:	201-06-9

Physical Properties

Property code	Value	Unit	Source
gf	491.18	kJ/mol	Joback Method
hf	367.77	kJ/mol	Joback Method
hfus	24.49	kJ/mol	Joback Method
hvap	59.09	kJ/mol	Joback Method
log10ws	-5.93		Crippen Method
logp	4.477		Crippen Method
mcvol	158.460	ml/mol	McGowan Method
pc	3072.75	kPa	Joback Method
rinpol	348.07		NIST Webbook
rinpol	348.40		NIST Webbook
rinpol	347.32		NIST Webbook
rinpol	347.82		NIST Webbook
rinpol	347.67		NIST Webbook
rinpol	343.50		NIST Webbook
rinpol	347.82		NIST Webbook
rinpol	348.14		NIST Webbook
rinpol	341.50		NIST Webbook
rinpol	344.20		NIST Webbook
rinpol	346.67		NIST Webbook
rinpol	348.20		NIST Webbook
rinpol	346.74		NIST Webbook
rinpol	347.12		NIST Webbook
rinpol	343.23		NIST Webbook
rinpol	343.50		NIST Webbook
rinpol	347.67		NIST Webbook
rinpol	2036.00		NIST Webbook

rinpol	348.14		NIST Webbook
tb	651.36	K	Joback Method
tc	907.48	K	Joback Method
tf	425.92	K	Joback Method
vc	0.620	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	387.64	J/mol×K	651.36	Joback Method
cpg	444.86	J/mol×K	864.79	Joback Method
cpg	434.86	J/mol×K	822.10	Joback Method
cpg	424.36	J/mol×K	779.42	Joback Method
cpg	413.12	J/mol×K	736.73	Joback Method
cpg	400.96	J/mol×K	694.05	Joback Method
cpg	454.56	J/mol×K	907.48	Joback Method
dvisc	0.0013128	Pa×s	651.36	Joback Method
dvisc	0.0013791	Pa×s	613.79	Joback Method
dvisc	0.0014580	Pa×s	576.21	Joback Method
dvisc	0.0015536	Pa×s	538.64	Joback Method
dvisc	0.0016712	Pa×s	501.07	Joback Method
dvisc	0.0018191	Pa×s	463.49	Joback Method
dvisc	0.0020100	Pa×s	425.92	Joback Method

Sources

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=C201069&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
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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