ANTHRACENE, TETRADECAHYDRO-

Other names:	Perhydroanthracene
	Tetradecahydroanthracene
	NSC 109497
	Perhydroanthracene, # 1
	Perhydroanthracene, # 2
	Perhydroanthracene, # 3
	Perhydroanthracene, # 4
	Perhydroanthracene, # 5
Inchi:	InChI=1S/C14H24/c1-2-6-12-10-14-8-4-3-7-13(14)9-11(12)5-1/h11-14H,1-10H2
InchiKey:	GVJFFQYXVOJXFI-UHFFFAOYSA-N
Formula:	C14H24
SMILES:	C1CCC2CC3CCCCC3CC2C1
Mol. weight [g/mol]:	192.35

Physical Properties

Property code	Value	Unit	Source
hf	-189.60	kJ/mol	Cheméo Relay (1.0)
hfus	16.99	kJ/mol	Joback Method
hvap	66.59	kJ/mol	Cheméo Relay (1.0)
ie	9.11	eV	Cheméo Relay (1.0)
log10ws	-6.42		Cheméo Relay (1.0)
logp	4.393		Crippen Method
mcvol	175.540	ml/mol	McGowan Method
pc	2311.39	kPa	Joback Method
rinpol	1550.00		NIST Webbook
rinpol	1544.00		NIST Webbook
rinpol	1500.00		NIST Webbook
rinpol	1528.00		NIST Webbook
rinpol	1483.00		NIST Webbook
rinpol	1508.00		NIST Webbook
rinpol	1480.00		NIST Webbook
rinpol	1500.00		NIST Webbook
rinpol	1523.00		NIST Webbook
rinpol	1498.00		NIST Webbook
rinpol	1518.00		NIST Webbook
rinpol	1518.00		NIST Webbook
rinpol	1529.00		NIST Webbook

rinpol	1561.00		NIST Webbook
rinpol	1540.00		NIST Webbook
rinpol	1481.00		NIST Webbook
rinpol	1520.00		NIST Webbook
tb	550.75	K	Cheméo Relay (1.0)
tc	775.81	K	Cheméo Relay (1.0)
tf	361.65 ± 5.00	K	NIST Webbook
tf	489.00 ± 2.00	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	476.02	J/mol×K	556.62	Joback Method
cpg	503.38	J/mol×K	595.35	Joback Method
cpg	528.90	J/mol×K	634.09	Joback Method
cpg	552.65	J/mol×K	672.82	Joback Method
cpg	574.73	J/mol×K	711.56	Joback Method
cpg	595.25	J/mol×K	750.29	Joback Method
cpg	614.30	J/mol×K	789.03	Joback Method
dvisc	0.0033535	Pa×s	279.52	Joback Method
dvisc	0.0021240	Pa×s	325.70	Joback Method
dvisc	0.0015068	Pa×s	371.89	Joback Method
dvisc	0.0011532	Pa×s	418.07	Joback Method
dvisc	0.0009308	Pa×s	464.25	Joback Method
dvisc	0.0007810	Pa×s	510.44	Joback Method
dvisc	0.0006747	Pa×s	556.62	Joback Method

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6596356&Units=SI

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
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