Phenanthrene, 9,10-dihydro, 1,10-propano

Inchi: InChI=1S/C17H16/c1-2-9-15-13(5-1)11-14-8-3-6-12-7-4-10-16(15)17(12)14/h1-2,4-5,7,9-
InchiKey: OAAOAXXMUNESLP-UHFFFAOYSA-N
Formula: C17H16
SMILES: c1ccc2c(c1)CC1CCCc3cccc-2c31
Mol. weight [g/mol]: 220.31

Physical Properties

Property code	Value	Unit	Source
gf	429.50	kJ/mol	Joback Method
hf	216.54	kJ/mol	Joback Method
hfus	24.00	kJ/mol	Joback Method
hvap	59.94	kJ/mol	Joback Method
log10ws	-5.82		Crippen Method
logp	4.330		Crippen Method
mcvol	181.150	ml/mol	McGowan Method
pc	2589.85	kPa	Joback Method
rinpol	1808.00		NIST Webbook
tb	670.54	K	Joback Method
tc	923.65	K	Joback Method
tf	415.39	K	Joback Method
vc	0.695	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	489.10	J/mol×K	670.54	Joback Method
cpg	566.45	J/mol×K	881.47	Joback Method
cpg	553.05	J/mol×K	839.28	Joback Method
cpg	538.80	J/mol×K	797.10	Joback Method
cpg	523.52	J/mol×K	754.91	Joback Method
cpg	507.02	J/mol×K	712.73	Joback Method
cpg	579.20	J/mol×K	923.65	Joback Method
dvisc	0.0010397	Pa×s	670.54	Joback Method
dvisc	0.0011302	Pa×s	628.01	Joback Method

dvisc	0.0012437	Pa×s	585.49	Joback Method
dvisc	0.0013891	Pa×s	542.96	Joback Method
dvisc	0.0015810	Pa×s	500.44	Joback Method
dvisc	0.0018432	Pa×s	457.91	Joback Method
dvisc	0.0022175	Pa×s	415.39	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R73018&Units=SI

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