1,4:5,8:9,10-Trimethanoanthracene, 1,4,4a,5,8,8a,9,9a,10,10a-decahydro-(1«alpha»,4«a

Inchi: InChI=1S/C17H20/c1-2-9-5-8(1)14-12-7-13(15(9)14)17-11-4-3-10(6-11)16(12)17/h1-4,8-1

InchiKey: KVHGVQIXSZOTQM-PRFZSGCOSA-N

Formula: C17H20

SMILES: C1=CC2CC1C1C3CC(C21)C1C2C=CC(C2)C31

Mol. weight [g/mol]: 224.34

CAS: 83830-72-2

Physical Properties

Property code	Value	Unit	Source
gf	497.94	kJ/mol	Joback Method
hf	82.95	kJ/mol	Joback Method
hfus	37.42	kJ/mol	Joback Method
hvap	52.09	kJ/mol	Joback Method
ie	8.58	eV	NIST Webbook
log10ws	-3.60		Crippen Method
logp	3.513		Crippen Method
mcvol	176.630	ml/mol	McGowan Method
pc	2153.30	kPa	Joback Method
tb	604.17	K	Joback Method
tc	829.70	K	Joback Method
tf	377.07	K	Joback Method
vc	0.706	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	548.75	J/mol×K	604.17	Joback Method
cpg	572.31	J/mol×K	641.76	Joback Method
cpg	594.03	J/mol×K	679.35	Joback Method
cpg	614.14	J/mol×K	716.93	Joback Method
cpg	632.87	J/mol×K	754.52	Joback Method
cpg	650.45	J/mol×K	792.11	Joback Method
cpg	667.09	J/mol×K	829.70	Joback Method
dvisc	0.0048840	Pa×s	377.07	Joback Method

dvisc	0.0091159	Pa×s	414.92	Joback Method
dvisc	0.0153287	Pa×s	452.77	Joback Method
dvisc	0.0237898	Pa×s	490.62	Joback Method
dvisc	0.0346681	Pa×s	528.47	Joback Method
dvisc	0.0480408	Pa×s	566.32	Joback Method
dvisc	0.0639055	Pa×s	604.17	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=C83830722&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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume