Anthracene, 9-dodecyltetradecahydro-

Other names:	9-n-Dodecyl(tetradecahydroanthracene)
	9-Dodecyltetradecahydroanthracene
	9-Dodecyltetrahydroanthracene
Inchi:	InChI=1S/C26H48/c1-2-3-4-5-6-7-8-9-10-11-20-26-24-18-14-12-16-22(24)21-23-17-13-15
InchiKey:	QQGXTQQJKOBQFA-UHFFFAOYSA-N
Formula:	C26H48
SMILES:	CCCCCCCCCCCCC1C2CCCCC2CC2CCCCC21
Mol. weight [g/mol]:	360.66
CAS:	55401-75-7

Physical Properties

Property code	Value	Unit	Source
gf	274.37	kJ/mol	Joback Method
hf	-433.05	kJ/mol	Joback Method
hfus	49.14	kJ/mol	Joback Method
hvap	73.45	kJ/mol	Joback Method
log10ws	-9.18		Crippen Method
logp	8.930		Crippen Method
mcvol	344.620	ml/mol	McGowan Method
pc	938.07	kPa	Joback Method
rinpol	468.00		NIST Webbook
rinpol	468.00		NIST Webbook
tb	826.51	K	Joback Method
tc	1026.96	K	Joback Method
tf	410.52	K	Joback Method
vc	1.321	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1203.39	J/mol×K	826.51	Joback Method
cpg	1229.34	J/mol×K	859.92	Joback Method
cpg	1253.73	J/mol×K	893.33	Joback Method
cpg	1276.64	J/mol×K	926.73	Joback Method

cpg	1298.15	J/mol×K	960.14	Joback Method
cpg	1318.36	J/mol×K	993.55	Joback Method
cpg	1337.35	J/mol×K	1026.96	Joback Method
dvisc	0.0030069	Pa×s	410.52	Joback Method
dvisc	0.0016056	Pa×s	479.85	Joback Method
dvisc	0.0010045	Pa×s	549.18	Joback Method
dvisc	0.0006982	Pa×s	618.51	Joback Method
dvisc	0.0005222	Pa×s	687.85	Joback Method
dvisc	0.0004119	Pa×s	757.18	Joback Method
dvisc	0.0003380	Pa×s	826.51	Joback Method
hvapt	102.70	kJ/mol	518.50	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C55401757&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

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
hvapt: Enthalpy of vaporization at a given temperature
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