1H-Dibenzo[a,i]fluorene, eicosahydro-

Other names:	Eicosahydrodibenzo(a,i)fluorene
	Perhydrodibenzo(a,i)fluorene
Inchi:	InChI=1S/C21H34/c1-3-7-16-14(5-1)9-11-18-19-12-10-15-6-2-4-8-17(15)21(19)13-20(16)
InchiKey:	AXAQHVIIZMRCDU-UHFFFAOYSA-N
Formula:	C21H34
SMILES:	C1CCC2C(C1)CCC1C2CC2C3CCCCC3CCC21
Mol. weight [g/mol]:	286.49
CAS:	55256-24-1

Physical Properties

Property code	Value	Unit	Source
gf	333.96	kJ/mol	Joback Method
hf	-210.75	kJ/mol	Joback Method
hfus	31.43	kJ/mol	Joback Method
hvap	62.01	kJ/mol	Joback Method
log10ws	-6.15		Crippen Method
logp	6.055		Crippen Method
mcvol	252.450	ml/mol	McGowan Method
pc	1558.58	kPa	Joback Method
tb	725.19	K	Joback Method
tc	964.56	K	Joback Method
tf	382.29	K	Joback Method
vc	0.946	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	863.15	J/mol×K	725.19	Joback Method
cpg	893.32	J/mol×K	765.09	Joback Method
cpg	921.27	J/mol×K	804.98	Joback Method
cpg	947.20	J/mol×K	844.88	Joback Method
cpg	971.27	J/mol×K	884.77	Joback Method
cpg	993.68	J/mol×K	924.67	Joback Method
cpg	1014.60	J/mol×K	964.56	Joback Method

dvisc	0.0051569	Pa×s	382.29	Joback Method
dvisc	0.0047433	Pa×s	439.44	Joback Method
dvisc	0.0044477	Pa×s	496.59	Joback Method
dvisc	0.0042262	Pa×s	553.74	Joback Method
dvisc	0.0040543	Pa×s	610.89	Joback Method
dvisc	0.0039172	Pa×s	668.04	Joback Method
dvisc	0.0038052	Pa×s	725.19	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55256241&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
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

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