cis-Cyclodecene, 1-methyl-

Inchi: InChI=1S/C11H20/c1-11-9-7-5-3-2-4-6-8-10-11/h9H,2-8,10H2,1H3/b11-9-
InchiKey: AAZWWRDLCYIVAB-LUAWRHEFSA-N
Formula: C11H20
SMILES: CC1=CCCCCCCCC1
Mol. weight [g/mol]: 152.28

Physical Properties

Property code	Value	Unit	Source
gf	45.83	kJ/mol	Joback Method
hf	-174.04	kJ/mol	Joback Method
hfus	7.44	kJ/mol	Joback Method
hvap	42.46	kJ/mol	Joback Method
log10ws	-4.18		Crippen Method
logp	4.067		Crippen Method
mcvol	150.690	ml/mol	McGowan Method
pc	2726.86	kPa	Joback Method
rinpol	1200.00		NIST Webbook
rinpol	1193.00		NIST Webbook
rinpol	1193.00		NIST Webbook
tb	496.52	K	Joback Method
tc	727.05	K	Joback Method
tf	224.55	K	Joback Method
vc	0.539	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	333.31	J/mol×K	496.52	Joback Method
cpg	435.83	J/mol×K	688.63	Joback Method
cpg	417.77	J/mol×K	650.21	Joback Method
cpg	398.49	J/mol×K	611.79	Joback Method
cpg	378.00	J/mol×K	573.36	Joback Method
cpg	356.27	J/mol×K	534.94	Joback Method
cpg	452.68	J/mol×K	727.05	Joback Method

dvisc	0.0001025	Pa×s	496.52	Joback Method
dvisc	0.0001673	Pa×s	451.19	Joback Method
dvisc	0.0003050	Pa×s	405.86	Joback Method
dvisc	0.0006463	Pa×s	360.53	Joback Method
dvisc	0.0017000	Pa×s	315.21	Joback Method
dvisc	0.0061880	Pa×s	269.88	Joback Method
dvisc	0.0379461	Pa×s	224.55	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R293342&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume