(E)-Cyclodecene, 4-methyl

Inchi: InChI=1S/C11H20/c1-11-9-7-5-3-2-4-6-8-10-11/h5,7,11H,2-4,6,8-10H2,1H3/b7-5+
InchiKey: XQSQAURBBWEJFV-FNORWQNLSA-N
Formula: C11H20
SMILES: CC1CC=CCCCCCC1
Mol. weight [g/mol]: 152.28

Physical Properties

Property code	Value	Unit	Source
gf	47.75	kJ/mol	Joback Method
hf	-182.91	kJ/mol	Joback Method
hfus	8.90	kJ/mol	Joback Method
hvap	41.49	kJ/mol	Joback Method
log10ws	-3.93		Crippen Method
logp	3.923		Crippen Method
mcvol	150.690	ml/mol	McGowan Method
pc	2676.31	kPa	Joback Method
rinpol	1168.00		NIST Webbook
tb	486.87	K	Joback Method
tc	715.93	K	Joback Method
tf	207.79	K	Joback Method
vc	0.538	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	331.91	J/mol×K	486.87	Joback Method
cpg	355.75	J/mol×K	525.05	Joback Method
cpg	378.33	J/mol×K	563.22	Joback Method
cpg	399.63	J/mol×K	601.40	Joback Method
cpg	419.68	J/mol×K	639.58	Joback Method
cpg	438.47	J/mol×K	677.75	Joback Method
cpg	456.01	J/mol×K	715.93	Joback Method
dvisc	0.0544216	Pa×s	207.79	Joback Method
dvisc	0.0076555	Pa×s	254.30	Joback Method

dvisc	0.0019751	Pa×s	300.82	Joback Method
dvisc	0.0007325	Pa×s	347.33	Joback Method
dvisc	0.0003434	Pa×s	393.84	Joback Method
dvisc	0.0001889	Pa×s	440.36	Joback Method
dvisc	0.0001165	Pa×s	486.87	Joback Method

Sources

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=R2692&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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