(Z,Z)-1,6-Cyclodecadiene, 4-methyl

Inchi: InChI=1S/C11H18/c1-11-9-7-5-3-2-4-6-8-10-11/h5-8,11H,2-4,9-10H2,1H3/b7-5-,8-6-
InchiKey: JMGOFVDQXYOGEN-SFECMWDFSA-N
Formula: C11H18
SMILES: CC1CC=CCCCC=CC1
Mol. weight [g/mol]: 150.26

Physical Properties

Property code	Value	Unit	Source
gf	77.71	kJ/mol	Joback Method
hf	-125.13	kJ/mol	Joback Method
hfus	10.12	kJ/mol	Joback Method
hvap	41.78	kJ/mol	Joback Method
log10ws	-3.79		Crippen Method
logp	3.699		Crippen Method
mcvol	146.390	ml/mol	McGowan Method
pc	2778.85	kPa	Joback Method
rinpol	1176.00		NIST Webbook
tb	486.03	K	Joback Method
tc	717.52	K	Joback Method
tf	208.55	K	Joback Method
vc	0.524	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	315.43	J/mol×K	486.03	Joback Method
cpg	415.97	J/mol×K	678.93	Joback Method
cpg	398.31	J/mol×K	640.35	Joback Method
cpg	379.44	J/mol×K	601.77	Joback Method
cpg	359.33	J/mol×K	563.19	Joback Method
cpg	338.00	J/mol×K	524.61	Joback Method
cpg	432.41	J/mol×K	717.52	Joback Method
dvisc	0.0001153	Pa×s	486.03	Joback Method
dvisc	0.0001829	Pa×s	439.78	Joback Method

dvisc	0.0003233	Pa×s	393.54	Joback Method
dvisc	0.0006652	Pa×s	347.29	Joback Method
dvisc	0.0017085	Pa×s	301.04	Joback Method
dvisc	0.0061799	Pa×s	254.80	Joback Method
dvisc	0.0395350	Pa×s	208.55	Joback Method

Sources

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=R3075&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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