(E,E)-1,6-Cyclodecadiene, 1-methyl

Inchi: InChI=1S/C13H22/c1-13-11-9-7-5-3-2-4-6-8-10-12-13/h2-3,11H,4-10,12H2,1H3/b3-2+,13
InchiKey: QYOLEDPEVIWBHX-SXBUOHTDSA-N
Formula: C13H22
SMILES: CC1=CCCCC=CCCCCC1
Mol. weight [g/mol]: 178.31

Physical Properties

Property code	Value	Unit	Source
gf	68.43	kJ/mol	Joback Method
hf	-169.86	kJ/mol	Joback Method
hfus	9.64	kJ/mol	Joback Method
hvap	47.55	kJ/mol	Joback Method
log10ws	-4.87		Crippen Method
logp	4.623		Crippen Method
mcvol	174.570	ml/mol	McGowan Method
pc	2448.32	kPa	Joback Method
rinpol	1178.00		NIST Webbook
tb	549.98	K	Joback Method
tc	791.73	K	Joback Method
tf	240.81	K	Joback Method
vc	0.622	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	417.50	J/mol×K	549.98	Joback Method
cpg	529.38	J/mol×K	751.44	Joback Method
cpg	510.11	J/mol×K	711.15	Joback Method
cpg	489.28	J/mol×K	670.86	Joback Method
cpg	466.90	J/mol×K	630.56	Joback Method
cpg	442.97	J/mol×K	590.27	Joback Method
cpg	547.09	J/mol×K	791.73	Joback Method
dvisc	0.0000471	Pa×s	549.98	Joback Method
dvisc	0.0000820	Pa×s	498.45	Joback Method

dvisc	0.0001619	Pa×s	446.92	Joback Method
dvisc	0.0003821	Pa×s	395.39	Joback Method
dvisc	0.0011660	Pa×s	343.87	Joback Method
dvisc	0.0052729	Pa×s	292.34	Joback Method
dvisc	0.0454859	Pa×s	240.81	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R2723&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