Cycloundecene (Z)

Other names:	(Z)-Cycloundecene
	cis-Cycloundecene
	c-Cycloundecene
Inchi:	InChI=1S/C11H20/c1-2-4-6-8-10-11-9-7-5-3-1/h1-2H,3-11H2/b2-1-
InchiKey:	GMUVJAZTJOCSND-UPHRSURJSA-N
Formula:	C11H20
SMILES:	C1=CCCCCCCCCC1
Mol. weight [g/mol]:	152.28
CAS:	13151-61-6

Physical Properties

Property code	Value	Unit	Source
gf	43.36	kJ/mol	Joback Method
hf	-168.73	kJ/mol	Joback Method
hfus	5.73	kJ/mol	Joback Method
hvap	41.97	kJ/mol	Joback Method
ie	8.65 ± 0.15	eV	NIST Webbook
log10ws	-4.18		Crippen Method
logp	4.067		Crippen Method
mcvol	150.690	ml/mol	McGowan Method
pc	2844.44	kPa	Joback Method
rinpol	1223.00		NIST Webbook
rinpol	1223.00		NIST Webbook
rinpol	1215.30		NIST Webbook
rinpol	1223.00		NIST Webbook
rinpol	1223.00		NIST Webbook
ripol	1257.00		NIST Webbook
tb	495.81	K	Joback Method
tc	734.15	K	Joback Method
tf	208.51	K	Joback Method
vc	0.531	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	332.50	J/mol×K	495.81	Joback Method
cpg	442.04	J/mol×K	694.42	Joback Method
cpg	422.93	J/mol×K	654.70	Joback Method
cpg	402.43	J/mol×K	614.98	Joback Method
cpg	380.53	J/mol×K	575.26	Joback Method
cpg	357.22	J/mol×K	535.53	Joback Method
cpg	459.75	J/mol×K	734.15	Joback Method
dvisc	0.0000880	Pa×s	495.81	Joback Method
dvisc	0.0001571	Pa×s	447.93	Joback Method
dvisc	0.0003223	Pa×s	400.04	Joback Method
dvisc	0.0008041	Pa×s	352.16	Joback Method
dvisc	0.0026742	Pa×s	304.28	Joback Method
dvisc	0.0139329	Pa×s	256.39	Joback Method
dvisc	0.1549257	Pa×s	208.51	Joback Method

Sources

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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C13151616&Units=SI

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
ie: Ionization energy
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

ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume