

(E)-Cyclodecene, 3-methyl

Inchi:	InChI=1S/C11H20/c1-11-9-7-5-3-2-4-6-8-10-11/h7,9,11H,2-6,8,10H2,1H3/b9-7+
InchiKey:	KBSFLXNAAXKOMU-VQHVLOKHSA-N
Formula:	C11H20
SMILES:	CC1C=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
mvol	150.690	ml/mol	McGowan Method
pc	2676.31	kPa	Joback Method
rinpol	1166.00		NIST Webbook
tb	486.87	K	Joback Method
tc	715.93	K	Joback Method
tf	207.79	K	Joback Method
vc	0.538	m ³ /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	Paxs	207.79	Joback Method
dvisc	0.0076555	Paxs	254.30	Joback Method

dvisc	0.0019751	Paxs	300.82	Joback Method
dvisc	0.0007325	Paxs	347.33	Joback Method
dvisc	0.0003434	Paxs	393.84	Joback Method
dvisc	0.0001889	Paxs	440.36	Joback Method
dvisc	0.0001165	Paxs	486.87	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R2689&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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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