

Cyclodecene, 1-methoxy-, (Z)-

Inchi:	InChI=1S/C11H20O/c1-12-11-9-7-5-3-2-4-6-8-10-11/h9H,2-8,10H2,1H3/b11-9+
InchiKey:	NWRHWUHZMHRZEM-PKQBQFBNSA-N
Formula:	C11H20O
SMILES:	COC1=CCCCCCCCC1
Mol. weight [g/mol]:	168.28
CAS:	78289-12-0

Physical Properties

Property code	Value	Unit	Source
gf	-59.17	kJ/mol	Joback Method
hf	-306.26	kJ/mol	Joback Method
hfus	8.63	kJ/mol	Joback Method
hvap	44.87	kJ/mol	Joback Method
log10ws	-3.76		Crippen Method
logp	3.651		Crippen Method
mvol	156.560	ml/mol	McGowan Method
pc	2679.08	kPa	Joback Method
tb	518.94	K	Joback Method
tc	746.75	K	Joback Method
tf	246.78	K	Joback Method
vc	0.557	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	361.79	J/molxK	518.94	Joback Method
cpg	461.77	J/molxK	708.78	Joback Method
cpg	444.12	J/molxK	670.81	Joback Method
cpg	425.28	J/molxK	632.84	Joback Method
cpg	405.27	J/molxK	594.88	Joback Method
cpg	384.11	J/molxK	556.91	Joback Method
cpg	478.23	J/molxK	746.75	Joback Method
dvisc	0.0000789	Paxs	518.94	Joback Method
dvisc	0.0001262	Paxs	473.58	Joback Method

dvisc	0.0002230	Paxs	428.22	Joback Method
dvisc	0.0004512	Paxs	382.86	Joback Method
dvisc	0.0011032	Paxs	337.50	Joback Method
dvisc	0.0035602	Paxs	292.14	Joback Method
dvisc	0.0176749	Paxs	246.78	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=C78289120&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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