

trans-1-Methoxycyclopentadecene

Inchi:	InChI=1S/C16H30O/c1-17-16-14-12-10-8-6-4-2-3-5-7-9-11-13-15-16/h14H,2-13,15H2,1H
InchiKey:	PJMSFACMMWSXKJ-JQIJEIRASA-N
Formula:	C16H30O
SMILES:	COC1=CCCCCCCCCCCCC1
Mol. weight [g/mol]:	238.41
CAS:	78289-15-3

Physical Properties

Property code	Value	Unit	Source
gf	-77.57	kJ/mol	Joback Method
hf	-440.26	kJ/mol	Joback Method
hfus	11.08	kJ/mol	Joback Method
hvap	56.86	kJ/mol	Joback Method
log10ws	-5.85		Crippen Method
logp	5.602		Crippen Method
mcvol	227.010	ml/mol	McGowan Method
pc	1911.91	kPa	Joback Method
tb	654.69	K	Joback Method
tc	900.11	K	Joback Method
tf	285.53	K	Joback Method
vc	0.797	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	643.26	J/molxK	654.69	Joback Method
cpg	769.96	J/molxK	859.21	Joback Method
cpg	749.12	J/molxK	818.30	Joback Method
cpg	725.98	J/molxK	777.40	Joback Method
cpg	700.59	J/molxK	736.50	Joback Method
cpg	673.00	J/molxK	695.59	Joback Method
cpg	788.45	J/molxK	900.11	Joback Method
dvisc	0.0000078	Paxs	654.69	Joback Method
dvisc	0.0000149	Paxs	593.16	Joback Method

dvisc	0.0000332	Paxs	531.64	Joback Method
dvisc	0.0000906	Paxs	470.11	Joback Method
dvisc	0.0003353	Paxs	408.58	Joback Method
dvisc	0.0019726	Paxs	347.06	Joback Method
dvisc	0.0249096	Paxs	285.53	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=C78289153&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
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/50-498-4/trans-1-Methoxycyclopentadecene.pdf>

Generated by Cheméo on 2024-04-19 18:15:00.325701531 +0000 UTC m=+15839749.246278852.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.