

1-Ethyl-5-methylcyclopentene

Other names:	2-Ethyl-3-methylcyclopentene
Inchi:	InChI=1S/C8H14/c1-3-8-6-4-5-7(8)2/h6-7H,3-5H2,1-2H3
InchiKey:	BZNBZJWJRSJMCINQO-UHFFFAOYSA-N
Formula:	C8H14
SMILES:	CCC1=CCCC1C
Mol. weight [g/mol]:	110.20
CAS:	97797-57-4

Physical Properties

Property code	Value	Unit	Source
gf	73.36	kJ/mol	Joback Method
hf	-101.66	kJ/mol	Joback Method
hfus	11.24	kJ/mol	Joback Method
hvap	34.61	kJ/mol	Joback Method
log10ws	-2.68		Crippen Method
logp	2.753		Crippen Method
mcvol	108.420	ml/mol	McGowan Method
pc	3138.51	kPa	Joback Method
tb	401.86	K	Joback Method
tc	598.12	K	Joback Method
tf	204.10	K	Joback Method
vc	0.410	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	203.22	J/mol×K	401.86	Joback Method
cpg	217.94	J/mol×K	434.57	Joback Method
cpg	231.96	J/mol×K	467.28	Joback Method
cpg	245.32	J/mol×K	499.99	Joback Method
cpg	258.02	J/mol×K	532.70	Joback Method
cpg	270.08	J/mol×K	565.41	Joback Method
cpg	281.54	J/mol×K	598.12	Joback Method
dvisc	0.0019956	Paxs	204.10	Joback Method

dvisc	0.0011356	Paxs	237.06	Joback Method
dvisc	0.0007416	Paxs	270.02	Joback Method
dvisc	0.0005313	Paxs	302.98	Joback Method
dvisc	0.0004064	Paxs	335.94	Joback Method
dvisc	0.0003261	Paxs	368.90	Joback Method
dvisc	0.0002713	Paxs	401.86	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C97797574&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

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	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/47-283-6/1-Ethyl-5-methylcyclopentene.pdf>

Generated by Cheméo on 2024-04-28 08:45:01.527608803 +0000 UTC m=+16583150.448186115.

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