Cyclopentane, 1-ethyl-2-methyl-

Other names: 1-Ethyl-2-methylcyclopentane
Inchi: InChI=1S/C8H16/c1-3-8-6-4-5-7(8)2/h7-8H,3-6H2,1-2H3
InchiKey: BSKOLJVTLRLTHE-UHFFFAOYSA-N
Formula: C8H16
SMILES: CCC1CCCC1C
Mol. weight [g/mol]: 112.21
CAS: 3726-46-3

Physical Properties

Property code	Value	Unit	Source
gf	45.32	kJ/mol	Joback Method
hf	-168.31	kJ/mol	Joback Method
hfus	11.48	kJ/mol	Joback Method
hvap	33.35	kJ/mol	Joback Method
log10ws	-2.58		Crippen Method
logp	2.833		Crippen Method
mcvol	112.720	ml/mol	McGowan Method
pc	2956.90	kPa	Joback Method
rinpol	794.00		NIST Webbook
rinpol	792.00		NIST Webbook
rinpol	811.00		NIST Webbook
rinpol	788.00		NIST Webbook
rinpol	790.00		NIST Webbook
rinpol	793.00		NIST Webbook
rinpol	789.00		NIST Webbook
rinpol	821.00		NIST Webbook
tb	393.05	K	Joback Method
tc	585.20	K	Joback Method
tf	186.58	K	Joback Method
vc	0.423	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	213.75	J/mol×K	393.05	Joback Method
cpg	290.01	J/mol×K	553.18	Joback Method
cpg	276.17	J/mol×K	521.15	Joback Method
cpg	261.64	J/mol×K	489.13	Joback Method
cpg	246.41	J/mol×K	457.10	Joback Method
cpg	230.45	J/mol×K	425.08	Joback Method
cpg	303.19	J/mol×K	585.20	Joback Method
dvisc	0.0002855	Pa×s	393.05	Joback Method
dvisc	0.0003410	Pa×s	358.64	Joback Method
dvisc	0.0004228	Pa×s	324.23	Joback Method
dvisc	0.0005518	Pa×s	289.81	Joback Method
dvisc	0.0007737	Pa×s	255.40	Joback Method
dvisc	0.0012051	Pa×s	220.99	Joback Method
dvisc	0.0022106	Pa×s	186.58	Joback Method

Sources

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=C3726463&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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