

cis-1,3-ethylmethylcyclopentane

Inchi:	InChI=1S/C8H16/c1-3-8-5-4-7(2)6-8/h7-8H,3-6H2,1-2H3/t7-,8+/m0/s1
InchiKey:	PQXAPVOKLYINEI-JGVFFNPUSA-N
Formula:	C8H16
SMILES:	CCC1CCC(C)C1
Mol. weight [g/mol]:	112.21

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
mvol	112.720	ml/mol	McGowan Method
pc	2956.90	kPa	Joback Method
rinpol	786.06		NIST Webbook
rinpol	787.32		NIST Webbook
tb	393.05	K	Joback Method
tc	585.20	K	Joback Method
tf	186.58	K	Joback Method
vc	0.423	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	213.75	J/mol×K	393.05	Joback Method
cpg	230.45	J/mol×K	425.08	Joback Method
cpg	246.41	J/mol×K	457.10	Joback Method
cpg	261.64	J/mol×K	489.13	Joback Method
cpg	276.17	J/mol×K	521.15	Joback Method
cpg	290.01	J/mol×K	553.18	Joback Method
cpg	303.19	J/mol×K	585.20	Joback Method
dvisc	0.0022106	Paxs	186.58	Joback Method

dvisc	0.0012051	Paxs	220.99	Joback Method
dvisc	0.0007737	Paxs	255.40	Joback Method
dvisc	0.0005518	Paxs	289.81	Joback Method
dvisc	0.0004228	Paxs	324.23	Joback Method
dvisc	0.0003410	Paxs	358.64	Joback Method
dvisc	0.0002855	Paxs	393.05	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R320484&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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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