

Cyclopentane, 1,2,3,4,5-pentamethyl-, (1,2,3/4,5)-

Inchi:	InChI=1S/C10H20/c1-6-7(2)9(4)10(5)8(6)3/h6-10H,1-5H3
InchiKey:	ZXVVIKMMTCNHIH-UHFFFAOYSA-N
Formula:	C10H20
SMILES:	CC1C(C)C(C)C(C)C1C
Mol. weight [g/mol]:	140.27
CAS:	33067-32-2

Physical Properties

Property code	Value	Unit	Source
gf	39.03	kJ/mol	Joback Method
hf	-270.61	kJ/mol	Joback Method
hfus	19.88	kJ/mol	Joback Method
hvap	36.88	kJ/mol	Joback Method
log10ws	-2.69		Crippen Method
logp	3.180		Crippen Method
mcvol	140.900	ml/mol	McGowan Method
pc	2204.15	kPa	Joback Method
tb	424.80	K	Joback Method
tc	612.45	K	Joback Method
tf	196.40	K	Joback Method
vc	0.532	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	298.97	J/mol×K	424.80	Joback Method
cpg	389.27	J/mol×K	581.18	Joback Method
cpg	372.67	J/mol×K	549.90	Joback Method
cpg	355.35	J/mol×K	518.63	Joback Method
cpg	337.29	J/mol×K	487.35	Joback Method
cpg	318.50	J/mol×K	456.08	Joback Method
cpg	405.16	J/mol×K	612.45	Joback Method
dvisc	0.0002766	Paxs	424.80	Joback Method
dvisc	0.0002878	Paxs	386.73	Joback Method

dvisc	0.0003021	Paxs	348.67	Joback Method
dvisc	0.0003210	Paxs	310.60	Joback Method
dvisc	0.0003468	Paxs	272.53	Joback Method
dvisc	0.0003843	Paxs	234.47	Joback Method
dvisc	0.0004431	Paxs	196.40	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C33067322&Units=SI

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

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