

Cyclopentane, 1-methyl-3-(2-methyl-1-propenyl)-

Inchi:	InChI=1S/C10H18/c1-8(2)6-10-5-4-9(3)7-10/h6,9-10H,4-5,7H2,1-3H3
InchiKey:	ZNVLSGKSXSJTNY-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	CC(C)=CC1CCC(C)C1
Mol. weight [g/mol]:	138.25
CAS:	75873-01-7

Physical Properties

Property code	Value	Unit	Source
gf	133.83	kJ/mol	Joback Method
hf	-102.16	kJ/mol	Joback Method
hfus	15.55	kJ/mol	Joback Method
hvap	37.84	kJ/mol	Joback Method
log10ws	-3.27		Crippen Method
logp	3.389		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2566.29	kPa	Joback Method
rinpol	972.00		NIST Webbook
rinpol	968.00		NIST Webbook
rinpol	972.00		NIST Webbook
rinpol	975.00		NIST Webbook
rinpol	969.00		NIST Webbook
rinpol	971.00		NIST Webbook
rinpol	975.00		NIST Webbook
rinpol	968.00		NIST Webbook
tb	442.85	K	Joback Method
tc	645.23	K	Joback Method
tf	190.08	K	Joback Method
vc	0.516	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.79	J/mol×K	442.85	Joback Method

cpg	303.75	J/mol×K	476.58	Joback Method
cpg	321.71	J/mol×K	510.31	Joback Method
cpg	338.72	J/mol×K	544.04	Joback Method
cpg	354.80	J/mol×K	577.77	Joback Method
cpg	370.01	J/mol×K	611.50	Joback Method
cpg	384.38	J/mol×K	645.23	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C75873017&Units=SI

Legend

cpg:	Ideal gas heat capacity
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

Latest version available from:

<https://www.chemeo.com/cid/25-166-0/Cyclopentane-1-methyl-3-2-methyl-1-propenyl.pdf>

Generated by Cheméo on 2024-04-18 04:39:57.960965581 +0000 UTC m=+15704446.881542893.

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