Cyclopentane, 1,2-dimethyl-3-(1-methylethenyl)-

Other names:	Cyclopentane, 1-isopropenyl-2,3-dimethyl-
	1-Isopropenyl-2,3-dimethylcyclopentane
Inchi:	InChI=1S/C10H18/c1-7(2)10-6-5-8(3)9(10)4/h8-10H,1,5-6H2,2-4H3
InchiKey:	ZBKRDRMFFBPADO-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	C=C(C)C1CCC(C)C1C
Mol. weight [g/mol]:	138.25
CAS:	6983-03-5

Physical Properties

Property code	Value	Unit	Source
gf	133.74	kJ/mol	Joback Method
hf	-114.29	kJ/mol	Joback Method
hfus	15.14	kJ/mol	Joback Method
hvap	36.90	kJ/mol	Joback Method
log10ws	-3.03		Crippen Method
logp	3.245		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2458.04	kPa	Joback Method
tb	430.70	K	Joback Method
tc	627.14	K	Joback Method
tf	189.16	K	Joback Method
vc	0.516	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	283.12	J/mol×K	430.70	Joback Method
cpg	301.98	J/mol×K	463.44	Joback Method
cpg	319.96	J/mol×K	496.18	Joback Method
cpg	337.09	J/mol×K	528.92	Joback Method
cpg	353.38	J/mol×K	561.66	Joback Method
cpg	368.88	J/mol×K	594.40	Joback Method
cpg	383.58	J/mol×K	627.14	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6983035&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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
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/76-240-1/Cyclopentane-1-2-dimethyl-3-1-methylethenyl.pdf
Generated by Cheméo on 2024-10-12 02:19:02.051518897 +0000 UTC m=+3280404.688488148.
Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.