Cyclohexane, 1-methyl-4-(1-methylethylidene)-

Other names:	p-Menth-4(8)-ene
	4-Methyl-1-isopropylidenecyclohexane
	1-Isopropylidene-4-methylcyclohexane
	4(8)-p-Menthene
	«DELTA»4(8)-Menthene
	p-Ment-4(8)-ene
Inchi:	InChI=1S/C10H18/c1-8(2)10-6-4-9(3)5-7-10/h9H,4-7H2,1-3H3
InchiKey:	OLZFGHOLNXRJEC-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	CC(C)=C1CCC(C)CC1
Mol. weight [g/mol]:	138.25
CAS:	1124-27-2

Physical Properties

Property code	Value	Unit	Source
gf	94.68	kJ/mol	Joback Method
hf	-129.17	kJ/mol	Joback Method
hfus	12.50	kJ/mol	Joback Method
hvap	39.15	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.533		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2659.77	kPa	Joback Method
rinpol	998.00		NIST Webbook
rinpol	1025.90		NIST Webbook
rinpol	1018.00		NIST Webbook
rinpol	998.00		NIST Webbook
rinpol	1025.90		NIST Webbook
ripol	1220.00		NIST Webbook
tb	446.00 ± 6.00	K	NIST Webbook
tb	446.00 ± 6.00	K	NIST Webbook
tc	662.43	K	Joback Method
tf	206.24	K	Joback Method
vc	0.512	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.34	J/mol×K	454.27	Joback Method
cpg	305.04	J/mol×K	488.96	Joback Method
cpg	322.79	J/mol×K	523.66	Joback Method
cpg	339.62	J/mol×K	558.35	Joback Method
cpg	355.55	J/mol×K	593.04	Joback Method
cpg	370.62	J/mol×K	627.74	Joback Method
cpg	384.85	J/mol×K	662.43	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1124272&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
rinpol: Non-polar retention indices
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume