Cyclohexane, 1-methyl-4-(1-methylethenyl)-, trans-

Other names: p-Menth-8-ene, trans-
trans-p-Menth-8-ene
trans-1-Isopropenyl-4-methylcyclohexane
8-p-Menthene (trans)
1-Isopropenyl-4-methylcyclohexane, (E)-

Inchi: InChI=1S/C10H18/c1-8(2)10-6-4-9(3)5-7-10/h9-10H,1,4-7H2,2-3H3/t9-,10-

InchiKey: WPMKLOWQWIDOJN-MGCOHNPYSA-N

Formula: C10H18

SMILES: C=C(C)C1CCC(C)CC1

Mol. weight [g/mol]: 138.25

CAS: 1124-25-0

Physical Properties

Property code	Value	Unit	Source
gf	129.35	kJ/mol	Joback Method
hf	-100.11	kJ/mol	Joback Method
hfus	11.97	kJ/mol	Joback Method
hvap	37.38	kJ/mol	Joback Method
log10ws	-3.27		Crippen Method
logp	3.389		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2605.74	kPa	Joback Method
rinpol	980.30		NIST Webbook
rinpol	974.10		NIST Webbook
tb	434.20 ± 2.00	K	NIST Webbook
tb	516.15 ± 3.00	K	NIST Webbook
tc	644.45	K	Joback Method
tf	189.88	K	Joback Method
vc	0.509	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	282.84	J/mol×K	439.64	Joback Method

cpg	302.49	J/mol×K	473.78	Joback Method
cpg	321.16	J/mol×K	507.91	Joback Method
cpg	338.90	J/mol×K	542.05	Joback Method
cpg	355.71	J/mol×K	576.18	Joback Method
cpg	371.63	J/mol×K	610.32	Joback Method
cpg	386.68	J/mol×K	644.45	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1124250&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume