Cyclohexane, 1-methylene-4-(1-methylethenyl)-

Other names: p-Mentha-1(7),8-diene
«psi»-Limonene
Pseudolimonen
Pseudolimonene
1(7), 8-p-Menthadiene
Mentha-1,7(8)-diene
1-methylene-4-(1-methylvinyl)cyclohexane

Inchi: InChI=1S/C10H16/c1-8(2)10-6-4-9(3)5-7-10/h10H,1,3-7H2,2H3

InchiKey: GOQRXDTWKVYHJH-UHFFFAOYSA-N

Formula: C10H16

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

Mol. weight [g/mol]: 136.23

CAS: 499-97-8

Physical Properties

Property code	Value	Unit	Source
gf	190.14	kJ/mol	Joback Method
hf	4.47	kJ/mol	Joback Method
hfus	9.74	kJ/mol	Joback Method
hvap	37.85	kJ/mol	Joback Method
log10ws	-3.37		Crippen Method
logp	3.309		Crippen Method
mcvol	132.300	ml/mol	McGowan Method
pc	2749.78	kPa	Joback Method
rinpol	1004.00		NIST Webbook
rinpol	996.00		NIST Webbook
rinpol	1018.00		NIST Webbook
rinpol	997.00		NIST Webbook
rinpol	999.00		NIST Webbook
rinpol	1003.00		NIST Webbook
rinpol	1004.00		NIST Webbook
rinpol	1003.00		NIST Webbook
rinpol	1004.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	999.00		NIST Webbook
rinpol	1010.00		NIST Webbook
rinpol	990.00		NIST Webbook

rinpol	1004.00		NIST Webbook
rinpol	1020.00		NIST Webbook
rinpol	1010.00		NIST Webbook
rinpol	1003.00		NIST Webbook
rinpol	1007.00		NIST Webbook
rinpol	1005.00		NIST Webbook
rinpol	1004.00		NIST Webbook
rinpol	992.00		NIST Webbook
rinpol	993.00		NIST Webbook
rinpol	1006.00		NIST Webbook
rinpol	1012.00		NIST Webbook
rinpol	1007.00		NIST Webbook
rinpol	1003.00		NIST Webbook
ripol	1137.00		NIST Webbook
ripol	1158.00		NIST Webbook
ripol	1183.00		NIST Webbook
ripol	1137.00		NIST Webbook
ripol	1183.00		NIST Webbook
ripol	1183.00		NIST Webbook
ripol	1183.00		NIST Webbook
ripol	1183.00		NIST Webbook
ripol	1183.00		NIST Webbook
ripol	1183.00		NIST Webbook
ripol	1172.00		NIST Webbook
tb	443.47	K	Joback Method
tc	650.56	K	Joback Method
tf	207.80	K	Joback Method
vc	0.494	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	268.27	J/mol×K	443.47	Joback Method
cpg	286.04	J/mol×K	477.98	Joback Method
cpg	302.90	J/mol×K	512.50	Joback Method
cpg	318.88	J/mol×K	547.01	Joback Method
cpg	334.01	J/mol×K	581.53	Joback Method
cpg	348.32	J/mol×K	616.04	Joback Method
cpg	361.83	J/mol×K	650.56	Joback Method

Sources

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=C499978&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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