Cyclohexene, 1-methyl-5-(1-methylethenyl)-, (R)-

Other names: m-Mentha-6,8-diene, (R)-(+)-
(+)-m-Mentha-1(6),8-diene
(+)-Sylvestrene
D-sylvestrene
m-Mentha-1,8-diene, (+)-
Sylvestrene
Sylvestrene, (+)-
5-Isopropenyl-1-methyl-1-cyclohexene, (R)-
(R)-1-Methyl-5-(1-methylvinyl)cyclohexene
1-methyl-5-(1-methylethenyl)cyclohexene

Inchi: InChI=1S/C10H16/c1-8(2)10-6-4-5-9(3)7-10/h5,10H,1,4,6-7H2,2-3H3

InchiKey: JWQKMEKSFPNAIB-UHFFFAOYSA-N

Formula: C10H16

SMILES: C=C(C)C1CCC=C(C)C1

Mol. weight [g/mol]: 136.23

CAS: 1461-27-4

Physical Properties

Property code	Value	Unit	Source
chl	-6136.30	kJ/mol	NIST Webbook
gf	157.39	kJ/mol	Joback Method
hf	-33.46	kJ/mol	Joback Method
hfus	11.73	kJ/mol	Joback Method
hvap	38.65	kJ/mol	Joback Method
log10ws	-3.37		Crippen Method
logp	3.309		Crippen Method
mcvol	132.300	ml/mol	McGowan Method
pc	2755.56	kPa	Joback Method
rinpol	1024.00		NIST Webbook
rinpol	1027.00		NIST Webbook
rinpol	1028.00		NIST Webbook
rinpol	1032.00		NIST Webbook
rinpol	1027.00		NIST Webbook
rinpol	1009.00		NIST Webbook
rinpol	1027.00		NIST Webbook
rinpol	1032.00		NIST Webbook
rinpol	1028.00		NIST Webbook

rinpol	1027.00		NIST Webbook
rinpol	1018.00		NIST Webbook
rinpol	1029.00		NIST Webbook
rinpol	1026.00		NIST Webbook
rinpol	1030.00		NIST Webbook
rinpol	1021.00		NIST Webbook
rinpol	1027.00		NIST Webbook
rinpol	1019.00		NIST Webbook
rinpol	1016.00		NIST Webbook
rinpol	1016.00		NIST Webbook
rinpol	1018.00		NIST Webbook
rinpol	1032.00		NIST Webbook
rinpol	1016.00		NIST Webbook
rinpol	1006.00		NIST Webbook
ripol	1205.00		NIST Webbook
ripol	1200.00		NIST Webbook
ripol	1177.00		NIST Webbook
tb	448.45	K	Joback Method
tc	657.16	K	Joback Method
tf	207.40	K	Joback Method
vc	0.496	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	269.80	J/mol×K	448.45	Joback Method
cpg	287.42	J/mol×K	483.23	Joback Method
cpg	304.13	J/mol×K	518.02	Joback Method
cpg	319.94	J/mol×K	552.80	Joback Method
cpg	334.90	J/mol×K	587.59	Joback Method
cpg	349.03	J/mol×K	622.37	Joback Method
cpg	362.36	J/mol×K	657.16	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=C13898732&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

chl:	Standard liquid enthalpy of combustion
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