

m-Mentha-4,8-diene, (1S,3S)-(+)-

Other names:	3-Isopropenyl-5-methyl-1-cyclohexene-, (3S,5S)- cis-Meta-mentha-2,8-diene cis-m-Mentha-2,8-diene
Inchi:	InChI=1S/C10H16/c1-8(2)10-6-4-5-9(3)7-10/h4,6,9-10H,1,5,7H2,2-3H3/t9-,10+/m0/s1
InchiKey:	OJBWHTRRQQNRBF-VHSXEESVSA-N
Formula:	C10H16
SMILES:	C=C(C)C1C=CCC(C)C1
Mol. weight [g/mol]:	136.23
CAS:	5208-51-5

Physical Properties

Property code	Value	Unit	Source
gf	159.31	kJ/mol	Joback Method
hf	-42.33	kJ/mol	Joback Method
hfus	13.19	kJ/mol	Joback Method
hvap	37.68	kJ/mol	Joback Method
log10ws	-3.13		Crippen Method
logp	3.165		Crippen Method
mcvol	132.300	ml/mol	McGowan Method
pc	2704.22	kPa	Joback Method
rinpola	993.00		NIST Webbook
rinpola	982.00		NIST Webbook
tb	438.80	K	Joback Method
tc	645.73	K	Joback Method
tf	190.64	K	Joback Method
vc	0.495	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	268.35	J/mol×K	438.80	Joback Method
cpg	286.78	J/mol×K	473.29	Joback Method
cpg	304.27	J/mol×K	507.78	Joback Method
cpg	320.83	J/mol×K	542.27	Joback Method

cpg	336.50	J/mol×K	576.76	Joback Method
cpg	351.31	J/mol×K	611.25	Joback Method
cpg	365.28	J/mol×K	645.73	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=C5208515&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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

Latest version available from:

<https://www.chemeo.com/cid/32-961-9/m-Mentha-4-8-diene-1S-3S.pdf>

Generated by Cheméo on 2024-04-26 09:35:14.74959477 +0000 UTC m=+16413363.670172083.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.