1,3,8-p-Menthatriene

Other names:	p-Mentha-1,3,8-triene
	p-1,3,8-Menthatriene
	1,3,8-Menthatriene
	1,3,8-para-Menthatriene
	1,5,8-p-Mentatriene
	p-Menta-1,3,8-triene
	1,3-Cyclohexadiene, 1-methyl-4-(1-methylethenyl)-
Inchi:	InChI=1S/C10H14/c1-8(2)10-6-4-9(3)5-7-10/h4,6H,1,5,7H2,2-3H3
InchiKey:	XNMPFDIYAMOYRM-UHFFFAOYSA-N
Formula:	C10H14
SMILES:	C=C(C)C1=CC=C(C)CC1
Mol. weight [g/mol]:	134.22
CAS:	21195-59-5

Physical Properties

Property code	Value	Unit	Source
gf	185.43	kJ/mol	Joback Method
hf	33.19	kJ/mol	Joback Method
hfus	11.50	kJ/mol	Joback Method
hvap	39.91	kJ/mol	Joback Method
log10ws	-3.46		Crippen Method
logp	3.229		Crippen Method
mcvol	128.000	ml/mol	McGowan Method
pc	2918.68	kPa	Joback Method
rinpol	1110.00		NIST Webbook
rinpol	1110.00		NIST Webbook
rinpol	1113.00		NIST Webbook
rinpol	1111.00		NIST Webbook
rinpol	1104.00		NIST Webbook
rinpol	1113.00		NIST Webbook
rinpol	1112.00		NIST Webbook
rinpol	1105.00		NIST Webbook
rinpol	1123.00		NIST Webbook
rinpol	1111.00		NIST Webbook
rinpol	1108.00		NIST Webbook
rinpol	1111.00		NIST Webbook
rinpol	1108.00		NIST Webbook

rinpol	1114.00	NIST Webbook
rinpol	1138.50	NIST Webbook
rinpol	1125.00	NIST Webbook
rinpol	1110.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1110.00	NIST Webbook
rinpol	1110.00	NIST Webbook
rinpol	1109.00	NIST Webbook
rinpol	1119.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1130.00	NIST Webbook
rinpol	1109.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1113.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1115.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1111.00	NIST Webbook
rinpol	1078.00	NIST Webbook
rinpol	1111.00	NIST Webbook
rinpol	1111.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1111.00	NIST Webbook
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rinpol	1077.00	NIST Webbook
rinpol	1084.00	NIST Webbook
rinpol	1085.00	NIST Webbook
rinpol	1109.00	NIST Webbook
rinpol	1102.00	NIST Webbook
rinpol	1104.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1096.00	NIST Webbook
rinpol	1118.00	NIST Webbook
rinpol	1098.00	NIST Webbook
rinpol	1107.00	NIST Webbook
rinpol	1089.00	NIST Webbook
rinpol	1110.00	NIST Webbook
rinpol	1113.00	NIST Webbook
rinpol	1113.00	NIST Webbook
rinpol	1111.00	NIST Webbook

rinpol	1107.00		NIST Webbook
rinpol	1074.00		NIST Webbook
rinpol	1127.00		NIST Webbook
rinpol	1111.00		NIST Webbook
rinpol	1110.00		NIST Webbook
rinpol	1074.00		NIST Webbook
rinpol	1115.00		NIST Webbook
rinpol	1111.00		NIST Webbook
rinpol	1118.70		NIST Webbook
rinpol	1118.70		NIST Webbook
rinpol	1112.00		NIST Webbook
rinpol	1113.00		NIST Webbook
rinpol	1111.00		NIST Webbook
rinpol	1110.00		NIST Webbook
rinpol	1110.00		NIST Webbook
ripol	1408.00		NIST Webbook
ripol	1391.00		NIST Webbook
ripol	1453.00		NIST Webbook
ripol	1375.00		NIST Webbook
ripol	1383.00		NIST Webbook
ripol	1387.00		NIST Webbook
ripol	1391.00		NIST Webbook
ripol	1392.00		NIST Webbook
ripol	1441.00		NIST Webbook
ripol	1429.00		NIST Webbook
ripol	1408.00		NIST Webbook
ripol	1429.00		NIST Webbook
ripol	1408.00		NIST Webbook
ripol	1409.00		NIST Webbook
ripol	1409.00		NIST Webbook
ripol	1442.00		NIST Webbook
ripol	1429.00		NIST Webbook
ripol	1429.00		NIST Webbook
tb	457.26	K	Joback Method
tc	669.85	K	Joback Method
tf	224.92	K	Joback Method
vc	0.483	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	255.61	J/mol×K	457.26	Joback Method
cpg	271.16	J/mol×K	492.69	Joback Method
cpg	285.85	J/mol×K	528.12	Joback Method
cpg	299.72	J/mol×K	563.55	Joback Method
cpg	312.80	J/mol×K	598.99	Joback Method
cpg	325.13	J/mol×K	634.42	Joback Method
cpg	336.74	J/mol×K	669.85	Joback Method

Sources

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=C18368951&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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