m-Mentha-1(7),8-diene

Other names: trans-m-mentha-1(7),8-diene
Inchi: InChI=1S/C10H16/c1-8(2)10-6-4-5-9(3)7-10/h10H,1,3-7H2,2H3
InchiKey: IRKOFIFCPOQHKY-UHFFFAOYSA-N
Formula: C10H16
SMILES: C=C1CCCC(C(=C)C)C1
Mol. weight [g/mol]: 136.23
CAS: 55623-20-6

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	998.00		NIST Webbook
rinpol	1008.00		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:	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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55623206&Units=SI

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