1(7), 4(8)-P-menthadiene

Inchi: InChI=1S/C10H16/c1-8(2)10-6-4-9(3)5-7-10/h3-7H2,1-2H3
InchiKey: JAFDMBBDFYFVAB-UHFFFAOYSA-N
Formula: C10H16
SMILES: C=C1CCC(=C(C)C)CC1
Mol. weight [g/mol]: 136.23
CAS: 6876-10-4

Physical Properties

Property code	Value	Unit	Source
gf	155.47	kJ/mol	Joback Method
hf	-24.59	kJ/mol	Joback Method
hfus	10.27	kJ/mol	Joback Method
hvap	39.62	kJ/mol	Joback Method
log10ws	-3.61		Crippen Method
logp	3.453		Crippen Method
mcvol	132.300	ml/mol	McGowan Method
pc	2808.38	kPa	Joback Method
tb	458.10	K	Joback Method
tc	668.51	K	Joback Method
tf	224.16	K	Joback Method
vc	0.497	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	270.79	J/mol×K	458.10	Joback Method
cpg	287.60	J/mol×K	493.17	Joback Method
cpg	303.53	J/mol×K	528.24	Joback Method
cpg	318.60	J/mol×K	563.31	Joback Method
cpg	332.86	J/mol×K	598.37	Joback Method
cpg	346.33	J/mol×K	633.44	Joback Method
cpg	359.03	J/mol×K	668.51	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6876104&Units=SI
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

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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