1,2,4,4-Tetramethylcyclopentene

Inchi: InChI=1S/C9H16/c1-7-5-9(3,4)6-8(7)2/h5-6H2,1-4H3
InchiKey: NOZQIIOHDFVATK-UHFFFAOYSA-N
Formula: C9H16
SMILES: CC1=C(C)CC(C)(C)C1
Mol. weight [g/mol]: 124.22
CAS: 65378-76-9

Physical Properties

Property code	Value	Unit	Source
gf	66.66	kJ/mol	Joback Method
hf	-118.53	kJ/mol	Joback Method
hfus	7.15	kJ/mol	Joback Method
hvap	36.35	kJ/mol	Joback Method
log10ws	-3.10		Crippen Method
logp	3.143		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2918.68	kPa	Joback Method
rinpol	857.60		NIST Webbook
tb	429.96	K	Joback Method
tc	634.67	K	Joback Method
tf	251.79	K	Joback Method
vc	0.465	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	246.62	J/mol×K	429.96	Joback Method
cpg	262.48	J/mol×K	464.08	Joback Method
cpg	277.32	J/mol×K	498.20	Joback Method
cpg	291.22	J/mol×K	532.32	Joback Method
cpg	304.29	J/mol×K	566.43	Joback Method
cpg	316.62	J/mol×K	600.55	Joback Method
cpg	328.29	J/mol×K	634.67	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C65378769&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

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