1,3-Cyclohexadiene, 1,3,5,5-tetramethyl-

Other names: 1,3,5,5-Tetramethyl-1,3-cyclohexadiene
Inchi: InChI=1S/C10H16/c1-8-5-9(2)7-10(3,4)6-8/h5-6H,7H2,1-4H3
InchiKey: SZHAWDAGEJWQJK-UHFFFAOYSA-N
Formula: C10H16
SMILES: CC1=CC(C)(C)CC(C)=C1
Mol. weight [g/mol]: 136.23
CAS: 4724-89-4

Physical Properties

Property code	Value	Unit	Source
gf	92.94	kJ/mol	Joback Method
hf	-87.55	kJ/mol	Joback Method
hfus	8.86	kJ/mol	Joback Method
hvap	39.04	kJ/mol	Joback Method
log10ws	-3.37		Crippen Method
logp	3.309		Crippen Method
mcvol	132.300	ml/mol	McGowan Method
pc	2811.36	kPa	Joback Method
rinpol	1292.00		NIST Webbook
ripol	1406.00		NIST Webbook
tb	456.27	K	Joback Method
tc	668.83	K	Joback Method
tf	260.30	K	Joback Method
vc	0.498	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	273.78	J/mol×K	456.27	Joback Method
cpg	290.27	J/mol×K	491.70	Joback Method
cpg	305.70	J/mol×K	527.12	Joback Method
cpg	320.17	J/mol×K	562.55	Joback Method
cpg	333.78	J/mol×K	597.98	Joback Method
cpg	346.62	J/mol×K	633.40	Joback Method

cpg	358.81	J/mol×K	668.83	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=C4724894&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