2,4,6,9-Tetramethyldec-8-en-3,5-dione

Other names: 8-Decen-3,5-dione, 2,4,6,9-tetramethyl
Inchi: InChI=1S/C14H24O2/c1-9(2)7-8-11(5)14(16)12(6)13(15)10(3)4/h7,10-12H,8H2,1-6H3
InchiKey: VNEFXHWAHYWLHU-UHFFFAOYSA-N
Formula: C14H24O2
SMILES: CC(C)=CCC(C)C(=O)C(C)C(=O)C(C)C
Mol. weight [g/mol]: 224.34

Physical Properties

Property code	Value	Unit	Source
gf	-126.49	kJ/mol	Joback Method
hf	-465.86	kJ/mol	Joback Method
hfus	23.54	kJ/mol	Joback Method
hvap	59.12	kJ/mol	Joback Method
log10ws	-3.37		Crippen Method
logp	3.409		Crippen Method
mcvol	206.960	ml/mol	McGowan Method
pc	1803.09	kPa	Joback Method
rinpol	1461.00		NIST Webbook
rinpol	1467.00		NIST Webbook
rinpol	1461.00		NIST Webbook
rinpol	1464.00		NIST Webbook
ripol	1867.00		NIST Webbook
ripol	1869.00		NIST Webbook
ripol	1882.00		NIST Webbook
ripol	1867.00		NIST Webbook
tb	630.18	K	Joback Method
tc	824.55	K	Joback Method
tf	283.36	K	Joback Method
vc	0.794	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	545.13	J/mol×K	630.18	Joback Method

cpg	561.92	J/mol×K	662.57	Joback Method
cpg	577.81	J/mol×K	694.97	Joback Method
cpg	592.84	J/mol×K	727.36	Joback Method
cpg	607.05	J/mol×K	759.76	Joback Method
cpg	620.47	J/mol×K	792.15	Joback Method
cpg	633.14	J/mol×K	824.55	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R199587&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
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