2,6,6,10-Tetramethyl-undeca-8,10-diene-3,7-dione

Inchi: InChI=1S/C15H24O2/c1-11(2)7-8-14(17)15(5,6)10-9-13(16)12(3)4/h7-8,12H,1,9-10H2,2-
InchiKey: WDBJWFBDIGLJCZ-BQYQJAHWSA-N
Formula: C15H24O2
SMILES: C=C(C)C=CC(=O)C(C)(C)CCC(=O)C(C)C
Mol. weight [g/mol]: 236.35
CAS: 98419-16-0

Physical Properties

Property code	Value	Unit	Source
gf	-22.51	kJ/mol	Joback Method
hf	-359.26	kJ/mol	Joback Method
hfus	24.48	kJ/mol	Joback Method
hvap	60.16	kJ/mol	Joback Method
log10ws	-3.89		Crippen Method
logp	3.719		Crippen Method
mcvol	216.750	ml/mol	McGowan Method
pc	1727.46	kPa	Joback Method
rinpol	1786.00		NIST Webbook
tb	647.39	K	Joback Method
tc	845.60	K	Joback Method
tf	325.29	K	Joback Method
vc	0.833	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	577.51	J/mol×K	647.39	Joback Method
cpg	594.19	J/mol×K	680.43	Joback Method
cpg	609.89	J/mol×K	713.46	Joback Method
cpg	624.66	J/mol×K	746.50	Joback Method
cpg	638.57	J/mol×K	779.53	Joback Method
cpg	651.67	J/mol×K	812.57	Joback Method
cpg	664.04	J/mol×K	845.60	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C98419160&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