2,2,7,7-Tetramethyl-1,6-dioxaspiro{4,4]-non-3-ene

Other names: 2,2,7,7-tetramethyl-1,6-dioxaspiro[4.4] nona-3-ene
Inchi: InChI=1S/C11H18O2/c1-9(2)5-7-11(12-9)8-6-10(3,4)13-11/h5,7H,6,8H2,1-4H3
InchiKey: AKLWIMZXBONTDH-UHFFFAOYSA-N
Formula: C11H18O2
SMILES: CC1(C)C=CC2(CCC(C)(C)O2)O1
Mol. weight [g/mol]: 182.26

Physical Properties

Property code	Value	Unit	Source
gf	-39.52	kJ/mol	Joback Method
hf	-324.09	kJ/mol	Joback Method
hfus	13.57	kJ/mol	Joback Method
hvap	45.97	kJ/mol	Joback Method
log10ws	-3.08		Crippen Method
logp	2.637		Crippen Method
mcvol	151.570	ml/mol	McGowan Method
pc	3022.28	kPa	Joback Method
ripol	1236.00		NIST Webbook
ripol	1236.00		NIST Webbook
ripol	1230.00		NIST Webbook
tb	526.48	K	Joback Method
tc	764.12	K	Joback Method
tf	360.41	K	Joback Method
vc	0.562	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	384.55	J/mol×K	526.48	Joback Method
cpg	403.55	J/mol×K	566.09	Joback Method
cpg	420.85	J/mol×K	605.69	Joback Method
cpg	436.86	J/mol×K	645.30	Joback Method
cpg	451.97	J/mol×K	684.91	Joback Method
cpg	466.59	J/mol×K	724.51	Joback Method

cpg	481.12	J/mol×K	764.12	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R210129&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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