# (2R,5S)-2,6,10,10-Tetramethyl-1-oxaspiro[4.5]deca

**Inchi:** InChI=1S/C13H22O2/c1-9-5-8-13(15-9)10(2)11(14)6-7-12(13,3)4/h9-10H,5-8H2,1-4H3
**InchiKey:** UGLUSFJDQNOYMH-UHFFFAOYSA-N
**Formula:** C13H22O2
**SMILES:** CC1CCC2(O1)C(C)C(=O)CCC2(C)C
**Mol. weight [g/mol]:** 210.31
**CAS:** 66514-42-9

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -103.43 | kJ/mol | Joback Method |
| hf | -470.59 | kJ/mol | Joback Method |
| hfus | 14.33 | kJ/mol | Joback Method |
| hvap | 50.88 | kJ/mol | Joback Method |
| log10ws | -3.16 | | Crippen Method |
| logp | 2.949 | | Crippen Method |
| mcvol | 179.750 | ml/mol | McGowan Method |
| pc | 2365.67 | kPa | Joback Method |
| rinpol | 1553.80 | | NIST Webbook |
| rinpol | 1553.80 | | NIST Webbook |
| tb | 613.31 | K | Joback Method |
| tc | 854.77 | K | Joback Method |
| tf | 392.18 | K | Joback Method |
| vc | 0.667 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 510.45 | J/mol×K | 613.31 | Joback Method |
| cpg | 533.06 | J/mol×K | 653.55 | Joback Method |
| cpg | 554.45 | J/mol×K | 693.80 | Joback Method |
| cpg | 574.86 | J/mol×K | 734.04 | Joback Method |
| cpg | 594.54 | J/mol×K | 774.28 | Joback Method |
| cpg | 613.74 | J/mol×K | 814.52 | Joback Method |
| cpg | 632.72 | J/mol×K | 854.77 | Joback Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C66514429&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 |