# (Z)-«gamma»-Curcumyl 2-methylbutanoate

**Inchi:** InChI=1S/C20H30O3/c1-7-13(4)18(21)22-20-10-14(5)16-9-8-15(6)19(16,23-20)11-17(20)
**InchiKey:** WUHNNBNJYUGWOM-IKWVQECISA-N
**Formula:** C20H30O3
**SMILES:** C=C1CC2(OC(=O)C(C)CC)OC3(CC2=C(C)C)C(C)CCC13
**Mol. weight [g/mol]:** 318.45

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 24.39 | kJ/mol | Joback Method |
| hf | -471.51 | kJ/mol | Joback Method |
| hfus | 31.33 | kJ/mol | Joback Method |
| hvap | 71.89 | kJ/mol | Joback Method |
| log10ws | -5.53 | | Crippen Method |
| logp | 4.774 | | Crippen Method |
| mcvol | 264.790 | ml/mol | McGowan Method |
| pc | 1546.35 | kPa | Joback Method |
| rinpol | 1902.00 | | NIST Webbook |
| tb | 790.05 | K | Joback Method |
| tc | 1010.84 | K | Joback Method |
| tf | 499.31 | K | Joback Method |
| vc | 1.012 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 849.75 | J/mol×K | 790.05 | Joback Method |
| cpg | 871.59 | J/mol×K | 826.85 | Joback Method |
| cpg | 893.26 | J/mol×K | 863.65 | Joback Method |
| cpg | 915.04 | J/mol×K | 900.45 | Joback Method |
| cpg | 937.19 | J/mol×K | 937.25 | Joback Method |
| cpg | 960.01 | J/mol×K | 974.04 | Joback Method |
| cpg | 983.77 | J/mol×K | 1010.84 | Joback Method |

# Sources

| | |
|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=R626638&Units=SI |

# Legend

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|---|---|
| **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 |