# Pentapropylene glydol, diacetate

**Inchi:** InChI=1S/C19H36O8/c1-13(23-10-15(3)25-12-17(5)27-19(7)21)8-22-14(2)9-24-16(4)11-2
**InchiKey:** JHGXAHQHFIRYKT-UHFFFAOYSA-N
**Formula:** C19H36O8
**SMILES:** CC(=O)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OC(C)=O
**Mol. weight [g/mol]:** 392.48

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -790.94 | kJ/mol | Joback Method |
| hf | -1480.37 | kJ/mol | Joback Method |
| hfus | 37.68 | kJ/mol | Joback Method |
| hvap | 83.90 | kJ/mol | Joback Method |
| log10ws | -2.41 | | Crippen Method |
| logp | 2.122 | | Crippen Method |
| mcvol | 316.930 | ml/mol | McGowan Method |
| pc | 1127.59 | kPa | Joback Method |
| rinpol | 2137.00 | | NIST Webbook |
| rinpol | 2140.00 | | NIST Webbook |
| rinpol | 2139.00 | | NIST Webbook |
| tb | 874.18 | K | Joback Method |
| tc | 1071.46 | K | Joback Method |
| tf | 462.13 | K | Joback Method |
| vc | 1.190 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1035.40 | J/mol×K | 874.18 | Joback Method |
| cpg | 1052.13 | J/mol×K | 907.06 | Joback Method |
| cpg | 1067.37 | J/mol×K | 939.94 | Joback Method |
| cpg | 1081.10 | J/mol×K | 972.82 | Joback Method |
| cpg | 1093.29 | J/mol×K | 1005.70 | Joback Method |
| cpg | 1103.89 | J/mol×K | 1038.58 | Joback Method |
| cpg | 1112.90 | J/mol×K | 1071.46 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0004370 | Pa×s | 462.13 | Joback Method |
| dvisc | 0.0001634 | Pa×s | 530.81 | Joback Method |
| dvisc | 0.0000765 | Pa×s | 599.48 | Joback Method |
| dvisc | 0.0000419 | Pa×s | 668.15 | Joback Method |
| dvisc | 0.0000257 | Pa×s | 736.83 | Joback Method |
| dvisc | 0.0000171 | Pa×s | 805.51 | Joback Method |
| dvisc | 0.0000121 | Pa×s | 874.18 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=R152251&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

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **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 |