

Isophthalic acid, 2,7-dimethyloct-7-en-5-yn-4-yl pentyl ester

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| Inchi: | InChI=1S/C23H30O4/c1-6-7-8-14-26-22(24)19-10-9-11-20(16-19)23(25)27-21(15-18(4)5 |
| InchiKey: | SVMQKZQUVJPWMH-UHFFFAOYSA-N |
| Formula: | C23H30O4 |
| SMILES: | C=C(C)C#CC(CC(C)C)OC(=O)c1cccc(C(=O)OCCCC)c1 |
| Mol. weight [g/mol]: | 370.48 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | 54.93 | kJ/mol | Joback Method |
| hf | -405.21 | kJ/mol | Joback Method |
| hfus | 48.04 | kJ/mol | Joback Method |
| hvap | 88.83 | kJ/mol | Joback Method |
| log10ws | -6.92 | | Crippen Method |
| logp | 5.185 | | Crippen Method |
| mvol | 313.150 | ml/mol | McGowan Method |
| pc | 1280.08 | kPa | Joback Method |
| rinpol | 2610.00 | | NIST Webbook |
| rinpol | 2610.00 | | NIST Webbook |
| tb | 914.56 | K | Joback Method |
| tc | 1133.78 | K | Joback Method |
| tf | 592.61 | K | Joback Method |
| vc | 1.196 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|---------|---------|-----------------|---------------|
| cpg | 975.88 | J/mol×K | 914.56 | Joback Method |
| cpg | 991.59 | J/mol×K | 951.10 | Joback Method |
| cpg | 1005.98 | J/mol×K | 987.63 | Joback Method |
| cpg | 1019.10 | J/mol×K | 1024.17 | Joback Method |
| cpg | 1030.98 | J/mol×K | 1060.71 | Joback Method |
| cpg | 1041.66 | J/mol×K | 1097.24 | Joback Method |
| cpg | 1051.17 | J/mol×K | 1133.78 | Joback Method |

Sources

| | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U343848&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| Crippen Method: | https://www.cheméo.com/doc/models/crippen_log10ws |
| Joback Method: | https://en.wikipedia.org/wiki/Joback_method |

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 |
| h vap: | 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 |
| r in pol: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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