

Isophthalic acid, decyl 2-methylprop-2-en-1-yl ester

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| Inchi: | InChI=1S/C22H32O4/c1-4-5-6-7-8-9-10-11-15-25-21(23)19-13-12-14-20(16-19)22(24)26 |
| InchiKey: | NKTHWWCUCZANES-UHFFFAOYSA-N |
| Formula: | C22H32O4 |
| SMILES: | <chem>C=C(C)COC(=O)c1cccc(C(=O)OCCCCCCCCC)c1</chem> |
| Mol. weight [g/mol]: | 360.49 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -151.41 | kJ/mol | Joback Method |
| hf | -646.31 | kJ/mol | Joback Method |
| hfus | 49.37 | kJ/mol | Joback Method |
| hvap | 85.23 | kJ/mol | Joback Method |
| log10ws | -6.83 | | Crippen Method |
| logp | 5.717 | | Crippen Method |
| mvol | 307.660 | ml/mol | McGowan Method |
| pc | 1209.83 | kPa | Joback Method |
| rinpol | 2707.00 | | NIST Webbook |
| rinpol | 2707.00 | | NIST Webbook |
| tb | 883.56 | K | Joback Method |
| tc | 1088.50 | K | Joback Method |
| tf | 505.24 | K | Joback Method |
| vc | 1.190 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|---------|---------|-----------------|---------------|
| cpg | 968.67 | J/mol×K | 883.56 | Joback Method |
| cpg | 984.85 | J/mol×K | 917.72 | Joback Method |
| cpg | 999.85 | J/mol×K | 951.87 | Joback Method |
| cpg | 1013.69 | J/mol×K | 986.03 | Joback Method |
| cpg | 1026.40 | J/mol×K | 1020.19 | Joback Method |
| cpg | 1038.03 | J/mol×K | 1054.34 | Joback Method |
| cpg | 1048.60 | J/mol×K | 1088.50 | Joback Method |

Sources

| | |
|------------------------|---|
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U343953&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| 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 |

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 |
| hvp: | 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 |
| rinp: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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