

3-Methylbut-3-enyl (E)-2-methylbut-2-enoate

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|-----------------------------|---|
| Inchi: | InChI=1S/C10H16O2/c1-5-9(4)10(11)12-7-6-8(2)3/h5H,2,6-7H2,1,3-4H3/b9-5+ |
| InchiKey: | LMPCYQLIAVCCCL-WEVVVXLNSA-N |
| Formula: | C10H16O2 |
| SMILES: | C=C(C)CCOC(=O)C(C)=CC |
| Mol. weight [g/mol]: | 168.23 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | -49.64 | kJ/mol | Joback Method |
| hf | -271.46 | kJ/mol | Joback Method |
| hfus | 20.74 | kJ/mol | Joback Method |
| hvap | 46.46 | kJ/mol | Joback Method |
| log10ws | -2.58 | | Crippen Method |
| logp | 2.462 | | Crippen Method |
| mcvol | 150.600 | ml/mol | McGowan Method |
| pc | 2431.44 | kPa | Joback Method |
| rinpol | 1203.00 | | NIST Webbook |
| ripol | 1528.00 | | NIST Webbook |
| ripol | 1545.00 | | NIST Webbook |
| tb | 505.09 | K | Joback Method |
| tc | 694.94 | K | Joback Method |
| tf | 239.86 | K | Joback Method |
| vc | 0.583 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 332.18 | J/molxK | 505.09 | Joback Method |
| cpg | 345.83 | J/molxK | 536.73 | Joback Method |
| cpg | 358.83 | J/molxK | 568.37 | Joback Method |
| cpg | 371.21 | J/molxK | 600.02 | Joback Method |
| cpg | 382.99 | J/molxK | 631.66 | Joback Method |
| cpg | 394.19 | J/molxK | 663.30 | Joback Method |
| cpg | 404.83 | J/molxK | 694.94 | Joback Method |

Sources

| | |
|------------------------|---|
| 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 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U373732&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 |
| rinpolar: | Non-polar retention indices |
| ripolar: | Polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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