

2,2-Dimethylpropanoic acid, 3-chloroprop-2-enyl ester

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|----------------------|---|
| Inchi: | InChI=1S/C8H13ClO2/c1-8(2,3)7(10)11-6-4-5-9/h4-5H,6H2,1-3H3/b5-4+ |
| InchiKey: | HEINMRDBMAQWSG-SNAWJCMRSA-N |
| Formula: | C8H13ClO2 |
| SMILES: | CC(C)(C)C(=O)OCC=CCI |
| Mol. weight [g/mol]: | 176.64 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | -146.31 | kJ/mol | Joback Method |
| hf | -360.52 | kJ/mol | Joback Method |
| hfus | 16.25 | kJ/mol | Joback Method |
| hvap | 45.61 | kJ/mol | Joback Method |
| log10ws | -2.29 | | Crippen Method |
| logp | 2.328 | | Crippen Method |
| mcvol | 138.960 | ml/mol | McGowan Method |
| pc | 2752.67 | kPa | Joback Method |
| tb | 497.09 | K | Joback Method |
| tc | 698.01 | K | Joback Method |
| tf | 279.34 | K | Joback Method |
| vc | 0.525 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 293.37 | J/molxK | 497.09 | Joback Method |
| cpg | 305.75 | J/molxK | 530.58 | Joback Method |
| cpg | 317.41 | J/molxK | 564.06 | Joback Method |
| cpg | 328.39 | J/molxK | 597.55 | Joback Method |
| cpg | 338.71 | J/molxK | 631.04 | Joback Method |
| cpg | 348.41 | J/molxK | 664.52 | Joback Method |
| cpg | 357.52 | J/molxK | 698.01 | Joback Method |
| dvisc | 0.0037158 | Paxs | 279.34 | Joback Method |
| dvisc | 0.0017567 | Paxs | 315.63 | Joback Method |
| dvisc | 0.0009692 | Paxs | 351.92 | Joback Method |

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|-------|-----------|------|--------|---------------|
| dvisc | 0.0005977 | Paxs | 388.22 | Joback Method |
| dvisc | 0.0004003 | Paxs | 424.51 | Joback Method |
| dvisc | 0.0002856 | Paxs | 460.80 | Joback Method |
| dvisc | 0.0002140 | Paxs | 497.09 | Joback Method |

Sources

| | |
|------------------------|---|
| 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=U299339&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| Crippen Method: | https://www.chemeo.com/doc/models/crippen_log10ws |

Legend

| | |
|-----------------|---|
| 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 |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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