

Malonic acid, 2,2-dichloroethyl propyl ester

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|-----------------------------|---|
| Inchi: | InChI=1S/C8H12Cl2O4/c1-2-3-13-7(11)4-8(12)14-5-6(9)10/h6H,2-5H2,1H3 |
| InchiKey: | OSKMQXOYMHLDJW-UHFFFAOYSA-N |
| Formula: | C8H12Cl2O4 |
| SMILES: | CCCOC(=O)CC(=O)OCC(Cl)Cl |
| Mol. weight [g/mol]: | 243.08 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -477.66 | kJ/mol | Joback Method |
| hf | -734.81 | kJ/mol | Joback Method |
| hfus | 26.92 | kJ/mol | Joback Method |
| hvap | 60.10 | kJ/mol | Joback Method |
| log10ws | -1.81 | | Crippen Method |
| logp | 1.677 | | Crippen Method |
| mvol | 162.940 | ml/mol | McGowan Method |
| pc | 2603.08 | kPa | Joback Method |
| rinpol | 1470.00 | | NIST Webbook |
| rinpol | 1470.00 | | NIST Webbook |
| tb | 609.44 | K | Joback Method |
| tc | 805.72 | K | Joback Method |
| tf | 369.08 | K | Joback Method |
| vc | 0.624 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 372.93 | J/molxK | 609.44 | Joback Method |
| cpg | 420.74 | J/molxK | 773.01 | Joback Method |
| cpg | 412.26 | J/molxK | 740.30 | Joback Method |
| cpg | 403.23 | J/molxK | 707.58 | Joback Method |
| cpg | 393.66 | J/molxK | 674.87 | Joback Method |
| cpg | 383.56 | J/molxK | 642.15 | Joback Method |
| cpg | 428.67 | J/molxK | 805.72 | Joback Method |
| dvisc | 0.0001919 | Paxs | 609.44 | Joback Method |

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|-------|-----------|------|--------|---------------|
| dvisc | 0.0002469 | Paxs | 569.38 | Joback Method |
| dvisc | 0.0003299 | Paxs | 529.32 | Joback Method |
| dvisc | 0.0004623 | Paxs | 489.26 | Joback Method |
| dvisc | 0.0006879 | Paxs | 449.20 | Joback Method |
| dvisc | 0.0011065 | Paxs | 409.14 | Joback Method |
| dvisc | 0.0019734 | Paxs | 369.08 | 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=U349059&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| 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 |
| rinpol: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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