

Propionic acid, 3-iodo-, butyl ester

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| Inchi: | InChI=1S/C7H13IO2/c1-2-3-6-10-7(9)4-5-8/h2-6H2,1H3 |
| InchiKey: | GFBSJOIIEKBRHY-UHFFFAOYSA-N |
| Formula: | C7H13IO2 |
| SMILES: | CCCCOC(=O)CCI |
| Mol. weight [g/mol]: | 256.08 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | -167.74 | kJ/mol | Joback Method |
| hf | -355.74 | kJ/mol | Joback Method |
| hfus | 21.08 | kJ/mol | Joback Method |
| hvap | 49.70 | kJ/mol | Joback Method |
| log10ws | -2.56 | | Crippen Method |
| logp | 2.155 | | Crippen Method |
| mcvol | 142.750 | ml/mol | McGowan Method |
| pc | 2871.95 | kPa | Joback Method |
| rinpol | 1318.00 | | NIST Webbook |
| rinpol | 1318.00 | | NIST Webbook |
| tb | 528.99 | K | Joback Method |
| tc | 735.45 | K | Joback Method |
| tf | 298.87 | K | Joback Method |
| vc | 0.539 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 288.01 | J/molxK | 528.99 | Joback Method |
| cpg | 299.10 | J/molxK | 563.40 | Joback Method |
| cpg | 309.66 | J/molxK | 597.81 | Joback Method |
| cpg | 319.70 | J/molxK | 632.22 | Joback Method |
| cpg | 329.21 | J/molxK | 666.63 | Joback Method |
| cpg | 338.23 | J/molxK | 701.04 | Joback Method |
| cpg | 346.75 | J/molxK | 735.45 | Joback Method |
| dvisc | 0.0034653 | Paxs | 298.87 | Joback Method |

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|-------|-----------|------|--------|---------------|
| dvisc | 0.0018193 | Paxs | 337.22 | Joback Method |
| dvisc | 0.0010895 | Paxs | 375.58 | Joback Method |
| dvisc | 0.0007175 | Paxs | 413.93 | Joback Method |
| dvisc | 0.0005072 | Paxs | 452.28 | Joback Method |
| dvisc | 0.0003785 | Paxs | 490.64 | Joback Method |
| dvisc | 0.0002947 | Paxs | 528.99 | Joback Method |

Sources

| | |
|------------------------|---|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U406239&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 |

Legend

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|----------------------------|---|
| cp_g: | 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 |
| h_{vap}: | Enthalpy of vaporization at standard conditions |
| log₁₀ws: | Log ₁₀ of Water solubility in mol/l |
| log_p: | 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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