

Sebacic acid, di(but-3-yn-2-yl) ester

| | |
|-----------------------------|-----------------------------------------------------------------------------------|
| Inchi: | InChI=1S/C18H26O4/c1-5-15(3)21-17(19)13-11-9-7-8-10-12-14-18(20)22-16(4)6-2/h1-2, |
| InchiKey: | BZAIQLWYPRLMJI-UHFFFAOYSA-N |
| Formula: | C18H26O4 |
| SMILES: | <chem>C#CC(C)OC(=O)CCCCCCCCC(=O)OC(C)C#C</chem> |
| Mol. weight [g/mol]: | 306.40 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | 74.10 | kJ/mol | Joback Method |
| hf | -331.21 | kJ/mol | Joback Method |
| hfus | 46.85 | kJ/mol | Joback Method |
| hvap | 72.91 | kJ/mol | Joback Method |
| log10ws | -4.90 | | Crippen Method |
| logp | 3.237 | | Crippen Method |
| mvol | 262.160 | ml/mol | McGowan Method |
| pc | 1547.57 | kPa | Joback Method |
| rmpol | 2031.00 | | NIST Webbook |
| tb | 743.18 | K | Joback Method |
| tc | 936.10 | K | Joback Method |
| tf | 500.88 | K | Joback Method |
| vc | 1.004 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 745.93 | J/mol×K | 743.18 | Joback Method |
| cpg | 761.79 | J/mol×K | 775.33 | Joback Method |
| cpg | 776.75 | J/mol×K | 807.49 | Joback Method |
| cpg | 790.83 | J/mol×K | 839.64 | Joback Method |
| cpg | 804.06 | J/mol×K | 871.79 | Joback Method |
| cpg | 816.45 | J/mol×K | 903.94 | Joback Method |
| cpg | 828.03 | J/mol×K | 936.10 | Joback Method |

Sources

| | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U355853&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| Crippen Method: | https://www.chemeo.com/doc/models/crippen_log10ws |
| Joback Method: | https://en.wikipedia.org/wiki/Joback_method |

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

Latest version available from:

<https://www.chemeo.com/cid/47-473-5/Sebacic-acid-di-but-3-yn-2-yl-ester.pdf>

Generated by Cheméo on 2024-04-26 16:02:23.195577686 +0000 UTC m=+16436592.116154998.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.