# (-)-Dimethyl succinate

**Other names:** (-)-Dimenthyl succinate
Bis((1R,2S,5R)-2-isopropyl-5-methylcyclohexyl) succinate
Dimenthyl succinate
(-)-Dimethyl succinate
**Inchi:** InChI=1S/C24H42O4/c1-15(2)19-9-7-17(5)13-21(19)27-23(25)11-12-24(26)28-22-14-18(
**InchiKey:** YZXZAUAIVAZWFN-UHFFFAOYSA-N
**Formula:** C24H42O4
**SMILES:** CC1CCC(C(C)C)C(OC(=O)CCC(=O)OC2CC(C)CCC2C(C)C)C1
**Mol. weight [g/mol]:** 394.60

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hfus | 44.40 | kJ/mol | Joback Method |
| hvap | 108.64 | kJ/mol | Cheméo Relay (1.0) |
| logp | 5.775 | | Crippen Method |
| mcvol | 342.180 | ml/mol | McGowan Method |
| tb | 656.99 | K | Cheméo Relay (1.0) |
| tc | 870.27 | K | Cheméo Relay (1.0) |
| tf | 307.17 | K | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1228.01 | J/mol×K | 920.64 | Joback Method |
| cpg | 1248.56 | J/mol×K | 956.71 | Joback Method |
| cpg | 1266.98 | J/mol×K | 992.78 | Joback Method |
| cpg | 1283.28 | J/mol×K | 1028.85 | Joback Method |
| cpg | 1297.48 | J/mol×K | 1064.92 | Joback Method |
| cpg | 1309.59 | J/mol×K | 1100.99 | Joback Method |
| cpg | 1319.62 | J/mol×K | 1137.06 | Joback Method |
| dvisc | 0.0011986 | Pa×s | 472.36 | Joback Method |
| dvisc | 0.0005587 | Pa×s | 547.07 | Joback Method |
| dvisc | 0.0003128 | Pa×s | 621.79 | Joback Method |
| dvisc | 0.0001984 | Pa×s | 696.50 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0001374 | Pa×s | 771.21 | Joback Method |
| dvisc | 0.0001015 | Pa×s | 845.93 | Joback Method |
| dvisc | 0.0000788 | Pa×s | 920.64 | Joback Method |

# Sources

**Cheméo Relay (1.0, beta):**

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C34212594&Units=SI

**Joback Method:** https://en.wikipedia.org/wiki/Joback_method

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws

**Cheméo Relay (1.0):**

# Legend

**cpg:** Ideal gas heat capacity
**dvisc:** Dynamic viscosity
**hfus:** Enthalpy of fusion at standard conditions
**hvap:** Enthalpy of vaporization at standard conditions
**logp:** Octanol/Water partition coefficient
**mcvol:** McGowan's characteristic volume
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature
**tf:** Normal melting (fusion) point