

Glutaric acid, 2-methylbutyl tridecyl ester

| | |
|-----------------------------|--|
| Inchi: | InChI=1S/C23H44O4/c1-4-6-7-8-9-10-11-12-13-14-15-19-26-22(24)17-16-18-23(25)27-2 |
| InchiKey: | LVEUYADYTGLCNM-UHFFFAOYSA-N |
| Formula: | C23H44O4 |
| SMILES: | CCCCCCCCCCCCOC(=O)CCCC(=O)OCC(C)CC |
| Mol. weight [g/mol]: | 384.59 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|----------|----------------------|----------------|
| gf | -327.50 | kJ/mol | Joback Method |
| hf | -1012.93 | kJ/mol | Joback Method |
| hfus | 57.38 | kJ/mol | Joback Method |
| hvap | 84.72 | kJ/mol | Joback Method |
| log10ws | -6.93 | | Crippen Method |
| logp | 6.600 | | Crippen Method |
| mcvol | 349.810 | ml/mol | McGowan Method |
| pc | 903.97 | kPa | Joback Method |
| rinpola | 2684.00 | | NIST Webbook |
| tb | 877.78 | K | Joback Method |
| tc | 1074.72 | K | Joback Method |
| tf | 478.29 | K | Joback Method |
| vc | 1.365 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 1154.96 | J/molxK | 877.78 | Joback Method |
| cpg | 1240.32 | J/molxK | 1041.89 | Joback Method |
| cpg | 1225.74 | J/molxK | 1009.07 | Joback Method |
| cpg | 1209.94 | J/molxK | 976.25 | Joback Method |
| cpg | 1192.90 | J/molxK | 943.43 | Joback Method |
| cpg | 1174.58 | J/molxK | 910.60 | Joback Method |
| cpg | 1253.72 | J/molxK | 1074.72 | Joback Method |
| dvisc | 0.0000313 | Paxs | 877.78 | Joback Method |
| dvisc | 0.0000424 | Paxs | 811.20 | Joback Method |

| | | | | |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0000607 | Paxs | 744.62 | Joback Method |
| dvisc | 0.0000932 | Paxs | 678.03 | Joback Method |
| dvisc | 0.0001571 | Paxs | 611.45 | Joback Method |
| dvisc | 0.0003008 | Paxs | 544.87 | Joback Method |
| dvisc | 0.0006901 | Paxs | 478.29 | Joback Method |

Sources

| | |
|------------------------|---|
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U358402&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 |
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |

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 |

Latest version available from:

<https://www.chemeo.com/cid/18-469-2/Glutaric-acid-2-methylbutyl-tridecyl-ester.pdf>

Generated by Cheméo on 2024-04-20 15:02:09.282113221 +0000 UTC m=+15914578.202690543.

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