# Glutaric acid, dec-2-yl non-5-yn-3-yl ester

**Inchi:** InChI=1S/C24H42O4/c1-5-8-10-12-13-14-17-21(4)27-23(25)19-16-20-24(26)28-22(7-3)1
**InchiKey:** LIRFSNCDYGBGDX-UHFFFAOYSA-N
**Formula:** C24H42O4
**SMILES:** CCCC#CCC(CC)OC(=O)CCCC(=O)OC(C)CCCCCCCC
**Mol. weight [g/mol]:** 394.59

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -118.72 | kJ/mol | Joback Method |
| hf | -766.55 | kJ/mol | Joback Method |
| hfus | 59.57 | kJ/mol | Joback Method |
| hvap | 88.71 | kJ/mol | Joback Method |
| log10ws | -7.61 | | Crippen Method |
| logp | 6.354 | | Crippen Method |
| mcvol | 355.300 | ml/mol | McGowan Method |
| pc | 944.42 | kPa | Joback Method |
| rinpol | 2540.00 | | NIST Webbook |
| rinpol | 2540.00 | | NIST Webbook |
| tb | 909.22 | K | Joback Method |
| tc | 1113.45 | K | Joback Method |
| tf | 580.66 | K | Joback Method |
| vc | 1.377 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1165.63 | J/mol×K | 909.22 | Joback Method |
| cpg | 1184.33 | J/mol×K | 943.26 | Joback Method |
| cpg | 1201.67 | J/mol×K | 977.30 | Joback Method |
| cpg | 1217.69 | J/mol×K | 1011.34 | Joback Method |
| cpg | 1232.42 | J/mol×K | 1045.37 | Joback Method |
| cpg | 1245.89 | J/mol×K | 1079.41 | Joback Method |
| cpg | 1258.12 | J/mol×K | 1113.45 | Joback Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U393957&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 |
| **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/95-642-4/Glutaric-acid-dec-2-yl-non-5-yn-3-yl-ester.pdf

Generated by Cheméo on 2024-04-27 20:06:08.91540919 +0000 UTC m=+16537617.835986505.

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