# 2-[2-[2-(2,2,2-Trifluoroacetyl)oxyethoxy]ethoxy]et
# 2,2,2-trifluoroacetate

**Othernames:** Triethylene glycol bis(trifluoroacetate)
11,11,11-Trifluoro-10-oxo-3,6,9-trioxaundec-1-yl trifluoroacetate

**Inchi:** InChI=1S/C10H12F6O6/c11-9(12,13)7(17)21-5-3-19-1-2-20-4-6-22-8(18)10(14,15)16/h1-

**InchiKey:** AIYYCLMMVJJPJB-UHFFFAOYSA-N

**Formula:** C10H12F6O6

**SMILES:** O=C(OCCOCCOCCOC(=O)C(F)(F)F)C(F)(F)F

**Mol. weight [g/mol]:** 342.19

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1807.70 | kJ/mol | Joback Method |
| hf | -2197.93 | kJ/mol | Joback Method |
| hfus | 33.26 | kJ/mol | Joback Method |
| hvap | 53.49 | kJ/mol | Joback Method |
| log10ws | -1.23 | | Crippen Method |
| logp | 1.231 | | Crippen Method |
| mcvol | 189.000 | ml/mol | McGowan Method |
| pc | 1807.70 | kPa | Joback Method |
| rinpol | 1234.20 | | NIST Webbook |
| tb | 614.78 | K | Joback Method |
| tc | 772.80 | K | Joback Method |
| tf | 399.62 | K | Joback Method |
| vc | 0.765 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 522.27 | J/mol×K | 614.78 | Joback Method |
| cpg | 533.34 | J/mol×K | 641.12 | Joback Method |
| cpg | 543.87 | J/mol×K | 667.45 | Joback Method |
| cpg | 553.86 | J/mol×K | 693.79 | Joback Method |
| cpg | 563.33 | J/mol×K | 720.13 | Joback Method |
| cpg | 572.27 | J/mol×K | 746.47 | Joback Method |
| cpg | 580.70 | J/mol×K | 772.80 | Joback Method |

# Sources

| | |
|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U351899&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |