# Ethyl triacontyl ether

**Inchi:** InChI=1S/C32H66O/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-2
**InchiKey:** FZGSLMSRPRIPGT-UHFFFAOYSA-N
**Formula:** C32H66O
**SMILES:** CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCOCC
**Mol. weight [g/mol]:** 466.87

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 113.56 | kJ/mol | Joback Method |
| hf | -836.03 | kJ/mol | Joback Method |
| hfus | 79.82 | kJ/mol | Joback Method |
| hvap | 89.24 | kJ/mol | Joback Method |
| log10ws | -12.30 | | Crippen Method |
| logp | 11.966 | | Crippen Method |
| mcvol | 467.610 | ml/mol | McGowan Method |
| pc | 539.08 | kPa | Joback Method |
| rinpol | 3279.00 | | NIST Webbook |
| rinpol | 3279.00 | | NIST Webbook |
| tb | 953.98 | K | Joback Method |
| tc | 1192.42 | K | Joback Method |
| tf | 472.63 | K | Joback Method |
| vc | 1.845 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1654.49 | J/mol×K | 953.98 | Joback Method |
| cpg | 1684.24 | J/mol×K | 993.72 | Joback Method |
| cpg | 1711.87 | J/mol×K | 1033.46 | Joback Method |
| cpg | 1737.51 | J/mol×K | 1073.20 | Joback Method |
| cpg | 1761.29 | J/mol×K | 1112.94 | Joback Method |
| cpg | 1783.31 | J/mol×K | 1152.68 | Joback Method |
| cpg | 1803.69 | J/mol×K | 1192.42 | Joback Method |
| dvisc | 0.0005211 | Pa×s | 472.63 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0001809 | Pa×s | 552.86 | Joback Method |
| dvisc | 0.0000821 | Pa×s | 633.08 | Joback Method |
| dvisc | 0.0000445 | Pa×s | 713.31 | Joback Method |
| dvisc | 0.0000273 | Pa×s | 793.53 | Joback Method |
| dvisc | 0.0000183 | Pa×s | 873.76 | Joback Method |
| dvisc | 0.0000132 | Pa×s | 953.98 | Joback Method |

# Sources

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|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U406371&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 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |

# Legend

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|---|---|
| **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 |