# Carbamic acid, methylphenyl-, ethyl ester

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|---|---|
| **Other names:** | Carbanilic acid, N-methyl-, ethyl ester |
| | Ethyl methylphenylcarbamate |
| | Ethyl N-methyl-N-phenylcarbamate |
| | N-Methylcarbanilic acid, ethyl ester |
| | N-Methyl-N-phenylurethane |
| **Inchi:** | InChI=1S/C10H13NO2/c1-3-13-10(12)11(2)9-7-5-4-6-8-9/h4-8H,3H2,1-2H3 |
| **InchiKey:** | QHGZFCAIXRVHID-UHFFFAOYSA-N |
| **Formula:** | C10H13NO2 |
| **SMILES:** | CCOC(=O)N(C)c1ccccc1 |
| **Mol. weight [g/mol]:** | 179.22 |
| **CAS:** | 2621-79-6 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| chl | -5409.10 ± 5.00 | kJ/mol | NIST Webbook |
| chl | -5416.02 | kJ/mol | NIST Webbook |
| chs | -5628.30 | kJ/mol | NIST Webbook |
| gf | 22.59 | kJ/mol | Joback Method |
| hf | -190.47 | kJ/mol | Joback Method |
| hfl | -377.00 | kJ/mol | NIST Webbook |
| hfl | -384.00 ± 5.00 | kJ/mol | NIST Webbook |
| hfs | -165.00 | kJ/mol | NIST Webbook |
| hfus | 21.50 | kJ/mol | Joback Method |
| hvap | 51.33 | kJ/mol | Joback Method |
| log10ws | -2.06 | | Crippen Method |
| logp | 2.279 | | Crippen Method |
| mcvol | 145.420 | ml/mol | McGowan Method |
| pc | 3076.16 | kPa | Joback Method |
| tb | 543.61 | K | Joback Method |
| tc | 753.24 | K | Joback Method |
| tf | 333.51 | K | Joback Method |
| vc | 0.529 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 334.74 | J/mol×K | 543.61 | Joback Method |
| cpg | 349.03 | J/mol×K | 578.55 | Joback Method |
| cpg | 362.47 | J/mol×K | 613.49 | Joback Method |
| cpg | 375.08 | J/mol×K | 648.42 | Joback Method |
| cpg | 386.90 | J/mol×K | 683.36 | Joback Method |
| cpg | 397.95 | J/mol×K | 718.30 | Joback Method |
| cpg | 408.25 | J/mol×K | 753.24 | Joback Method |

# Sources

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|---|---|
| **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=C2621796&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

| | |
|---|---|
| **chl:** | Standard liquid enthalpy of combustion |
| **chs:** | Standard solid enthalpy of combustion |
| **cpg:** | Ideal gas heat capacity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfl:** | Liquid phase enthalpy of formation at standard conditions |
| **hfs:** | Solid phase 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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |

**tf:** Normal melting (fusion) point

**vc:** Critical Volume