# 5-ETHYLCYCLOPENT-1-ENECARBOXALDEHYDE

| | |
|---|---|
| **Other names:** | 1-Formyl-5-ethylcyclopentene |
| | 5-Ethyl-1-formylcyclopentene |
| | 5-Ethylcyclopentene-1-carbaldehyde |
| | Cyclopentene-1-carboxaldehyde, 5-ethyl |
| | 5-Ethyl-1-cyclopentene-1-carbaldehyde |
| | (5-Ethylcyclopent-1-enyl)-methanal |
| | Cyclopentene-1-carboxaldehyde, 5-methyl |
| | 5-Ethyl-1-cyclopentene-1-carboxaldehyde |
| **Inchi:** | InChI=1S/C8H12O/c1-2-7-4-3-5-8(7)6-9/h5-7H,2-4H2,1H3 |
| **InchiKey:** | BXRHTYIYAZHIHF-UHFFFAOYSA-N |
| **Formula:** | C8H12O |
| **SMILES:** | CCC1CCC=C1C=O |
| **Mol. weight [g/mol]:** | 124.18 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hfus | 13.53 | kJ/mol | Joback Method |
| logp | 1.932 | | Crippen Method |
| mcvol | 109.990 | ml/mol | McGowan Method |
| rinpol | 1040.00 | | NIST Webbook |
| rinpol | 1040.00 | | NIST Webbook |
| rinpol | 1026.00 | | NIST Webbook |
| rinpol | 1035.00 | | NIST Webbook |
| rinpol | 1013.00 | | NIST Webbook |
| rinpol | 1013.00 | | NIST Webbook |
| rinpol | 1010.00 | | NIST Webbook |
| rinpol | 1038.00 | | NIST Webbook |
| rinpol | 1053.00 | | NIST Webbook |
| rinpol | 1047.00 | | NIST Webbook |
| rinpol | 1039.00 | | NIST Webbook |
| ripol | 1428.00 | | NIST Webbook |
| ripol | 1428.00 | | NIST Webbook |
| ripol | 1416.00 | | NIST Webbook |
| ripol | 1404.00 | | NIST Webbook |
| ripol | 1399.00 | | NIST Webbook |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 226.00 | J/mol×K | 450.52 | Joback Method |
| cpg | 239.46 | J/mol×K | 484.34 | Joback Method |
| cpg | 252.22 | J/mol×K | 518.17 | Joback Method |
| cpg | 264.30 | J/mol×K | 551.99 | Joback Method |
| cpg | 275.74 | J/mol×K | 585.82 | Joback Method |
| cpg | 286.54 | J/mol×K | 619.64 | Joback Method |
| cpg | 296.74 | J/mol×K | 653.47 | Joback Method |
| dvisc | 0.0024771 | Pa×s | 246.10 | Joback Method |
| dvisc | 0.0014963 | Pa×s | 280.17 | Joback Method |
| dvisc | 0.0010082 | Pa×s | 314.24 | Joback Method |
| dvisc | 0.0007339 | Pa×s | 348.31 | Joback Method |
| dvisc | 0.0005653 | Pa×s | 382.38 | Joback Method |
| dvisc | 0.0004545 | Pa×s | 416.45 | Joback Method |
| dvisc | 0.0003776 | Pa×s | 450.52 | Joback Method |

# Sources

**Joback Method:** https://en.wikipedia.org/wiki/Joback_method
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**Cheméo Relay (1.0):**
**Cheméo Relay (1.0, beta):**
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C36431604&Units=SI

# Legend

**cpg:** Ideal gas heat capacity
**dvisc:** Dynamic viscosity
**hfus:** Enthalpy of fusion at standard conditions
**logp:** Octanol/Water partition coefficient
**mcvol:** McGowan's characteristic volume
**rinpol:** Non-polar retention indices

**ripol:** Polar retention indices