# 1,3,7-Octatriene, Z

**Inchi:** InChI=1S/C8H12/c1-3-5-7-8-6-4-2/h3-5,7H,1-2,6,8H2/b7-5-
**InchiKey:** ZTJHDEXGCKAXRZ-ALCCZGGFSA-N
**Formula:** C8H12
**SMILES:** C=CC=CCCC=C
**Mol. weight [g/mol]:** 108.18

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 272.38 | kJ/mol | Joback Method |
| hf | 159.63 | kJ/mol | Joback Method |
| hfus | 14.12 | kJ/mol | Joback Method |
| hvap | 32.02 | kJ/mol | Joback Method |
| log10ws | -2.73 | | Crippen Method |
| logp | 2.695 | | Crippen Method |
| mcvol | 110.680 | ml/mol | McGowan Method |
| pc | 2921.84 | kPa | Joback Method |
| rinpol | 790.00 | | NIST Webbook |
| rinpol | 790.00 | | NIST Webbook |
| tb | 379.96 | K | Joback Method |
| tc | 559.15 | K | Joback Method |
| tf | 171.32 | K | Joback Method |
| vc | 0.425 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 189.08 | J/mol×K | 379.96 | Joback Method |
| cpg | 200.86 | J/mol×K | 409.82 | Joback Method |
| cpg | 212.03 | J/mol×K | 439.69 | Joback Method |
| cpg | 222.63 | J/mol×K | 469.55 | Joback Method |
| cpg | 232.69 | J/mol×K | 499.42 | Joback Method |
| cpg | 242.22 | J/mol×K | 529.28 | Joback Method |
| cpg | 251.26 | J/mol×K | 559.15 | Joback Method |
| dvisc | 0.0035085 | Pa×s | 171.32 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0014324 | Pa×s | 206.09 | Joback Method |
| dvisc | 0.0007574 | Pa×s | 240.87 | Joback Method |
| dvisc | 0.0004703 | Pa×s | 275.64 | Joback Method |
| dvisc | 0.0003250 | Pa×s | 310.41 | Joback Method |
| dvisc | 0.0002419 | Pa×s | 345.19 | Joback Method |
| dvisc | 0.0001901 | Pa×s | 379.96 | Joback Method |

# Sources

| | |
|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=R294078&Units=SI |

# Legend

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