# cis-7,8-Epoxy-2-methyl-2-octadecene

**Inchi:** InChI=1S/C19H36O/c1-4-5-6-7-8-9-10-11-15-18-19(20-18)16-13-12-14-17(2)3/h14,18-19
**InchiKey:** XMPLISOJJFNIMC-UHFFFAOYSA-N
**Formula:** C19H36O
**SMILES:** CCCCCCCCCCC1OC1CCCC=C(C)C
**Mol. weight [g/mol]:** 280.49

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 147.69 | kJ/mol | Joback Method |
| hf | -407.60 | kJ/mol | Joback Method |
| hfus | 51.04 | kJ/mol | Joback Method |
| hvap | 62.04 | kJ/mol | Joback Method |
| log10ws | -6.84 | | Crippen Method |
| logp | 6.421 | | Crippen Method |
| mcvol | 269.280 | ml/mol | McGowan Method |
| pc | 1191.52 | kPa | Joback Method |
| rinpol | 2056.00 | | NIST Webbook |
| rinpol | 2056.00 | | NIST Webbook |
| tb | 667.18 | K | Joback Method |
| tc | 841.44 | K | Joback Method |
| tf | 325.12 | K | Joback Method |
| vc | 1.058 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 787.85 | J/mol×K | 667.18 | Joback Method |
| cpg | 808.34 | J/mol×K | 696.22 | Joback Method |
| cpg | 827.88 | J/mol×K | 725.27 | Joback Method |
| cpg | 846.51 | J/mol×K | 754.31 | Joback Method |
| cpg | 864.28 | J/mol×K | 783.35 | Joback Method |
| cpg | 881.25 | J/mol×K | 812.39 | Joback Method |
| cpg | 897.46 | J/mol×K | 841.44 | 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=R413615&Units=SI |

# 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 |

Latest version available from:

https://www.chemeo.com/cid/73-891-2/cis-7-8-Epoxy-2-methyl-2-octadecene.pdf

Generated by Cheméo on 2024-10-12 09:31:07.357971051 +0000 UTC m=+3306329.994940312.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.