

Myrcene epoxide

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|-----------------------------|-------------------------------------------------------------------|
| Other names: | Epoxymyrcene |
| Inchi: | InChI=1S/C10H16O/c1-5-8(2)6-7-9-10(3,4)11-9/h5,9H,1-2,6-7H2,3-4H3 |
| InchiKey: | DQGZGGZXMOFHLB-UHFFFAOYSA-N |
| Formula: | C10H16O |
| SMILES: | <chem>C=CC(=C)CCC1OC1(C)C</chem> |
| Mol. weight [g/mol]: | 152.23 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | 161.88 | kJ/mol | Joback Method |
| hf | -72.96 | kJ/mol | Joback Method |
| hfus | 18.67 | kJ/mol | Joback Method |
| hvap | 39.56 | kJ/mol | Joback Method |
| log10ws | -2.92 | | Crippen Method |
| logp | 2.686 | | Crippen Method |
| mcvol | 138.170 | ml/mol | McGowan Method |
| pc | 2613.74 | kPa | Joback Method |
| rinpol | 1064.00 | | NIST Webbook |
| rinpol | 1091.00 | | NIST Webbook |
| rinpol | 1071.00 | | NIST Webbook |
| rinpol | 1088.00 | | NIST Webbook |
| rinpol | 1091.00 | | NIST Webbook |
| rinpol | 1099.00 | | NIST Webbook |
| ripol | 1415.00 | | NIST Webbook |
| ripol | 1415.00 | | NIST Webbook |
| ripol | 1384.00 | | NIST Webbook |
| ripol | 1398.00 | | NIST Webbook |
| tb | 450.70 | K | Joback Method |
| tc | 644.70 | K | Joback Method |
| tf | 249.15 | K | Joback Method |
| vc | 0.533 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 301.19 | J/mol×K | 450.70 | Joback Method |
| cpg | 316.98 | J/mol×K | 483.03 | Joback Method |
| cpg | 331.68 | J/mol×K | 515.37 | Joback Method |
| cpg | 345.40 | J/mol×K | 547.70 | Joback Method |
| cpg | 358.23 | J/mol×K | 580.03 | Joback Method |
| cpg | 370.29 | J/mol×K | 612.36 | Joback Method |
| cpg | 381.66 | J/mol×K | 644.70 | Joback Method |

Sources

| | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 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=R195436&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| Crippen Method: | https://www.chemeo.com/doc/models/crippen_log10ws |

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 |
| rinpola: | Non-polar retention indices |
| ripola: | Polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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<https://www.chemeo.com/cid/25-619-7/Myrcene-epoxide.pdf>

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