# Benzene, 2-(1-decyl-1-undecenyl)-1,4-dimethyl-

**Other names:** 11-(2',5'-Dimethylphenyl)-10-heneicosene
11-(2,5-Dimethylphenyl)-10-heneicosene
**Inchi:** InChI=1S/C29H50/c1-5-7-9-11-13-15-17-19-21-28(29-25-26(3)23-24-27(29)4)22-20-18-1
**InchiKey:** HSENBQKKQBBBPT-SGWCAAJKSA-N
**Formula:** C29H50
**SMILES:** CCCCCCCCCC=C(CCCCCCCCCC)c1cc(C)ccc1C
**Mol. weight [g/mol]:** 398.71
**CAS:** 55373-90-5

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 358.12 | kJ/mol | Joback Method |
| hf | -320.87 | kJ/mol | Joback Method |
| hfus | 63.02 | kJ/mol | Joback Method |
| hvap | 83.79 | kJ/mol | Joback Method |
| log10ws | -11.20 | | Crippen Method |
| logp | 10.358 | | Crippen Method |
| mcvol | 391.410 | ml/mol | McGowan Method |
| pc | 753.08 | kPa | Joback Method |
| tb | 903.60 | K | Joback Method |
| tc | 1106.48 | K | Joback Method |
| tf | 449.01 | K | Joback Method |
| vc | 1.532 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1299.18 | J/mol×K | 903.60 | Joback Method |
| cpg | 1321.61 | J/mol×K | 937.41 | Joback Method |
| cpg | 1342.84 | J/mol×K | 971.23 | Joback Method |
| cpg | 1362.93 | J/mol×K | 1005.04 | Joback Method |
| cpg | 1381.99 | J/mol×K | 1038.85 | Joback Method |
| cpg | 1400.09 | J/mol×K | 1072.67 | Joback Method |
| cpg | 1417.32 | J/mol×K | 1106.48 | Joback Method |

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|---|---|---|---|---|
| hvapt | 99.20 | kJ/mol | 502.50 | NIST Webbook |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C55373905&Units=SI |
| **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 |

# 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 |
| **hvapt:** | Enthalpy of vaporization at a given temperature |
| **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 |

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