

Thiophene, 2-(1,1-dimethylethyl)-

| | |
|-----------------------------|---|
| Other names: | 2-tert-Butylthiophene Thiophene, 2-tert-butyl- |
| Inchi: | InChI=1S/C8H12S/c1-8(2,3)7-5-4-6-9-7/h4-6H,1-3H3 |
| InchiKey: | SWCDOJGIOCVMXFM-UHFFFAOYSA-N |
| Formula: | C8H12S |
| SMILES: | CC(C)(C)c1cccs1 |
| Mol. weight [g/mol]: | 140.25 |
| CAS: | 1689-78-7 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------------|--------|----------------|
| ie | 8.30 | eV | NIST Webbook |
| ie | 8.48 | eV | NIST Webbook |
| ie | 8.32 | eV | NIST Webbook |
| log10ws | -2.54 | | Crippen Method |
| logp | 3.046 | | Crippen Method |
| mcvol | 120.470 | ml/mol | McGowan Method |
| rinpol | 989.00 | | NIST Webbook |
| rinpol | 989.00 | | NIST Webbook |
| rinpol | 989.00 | | NIST Webbook |
| tb | 437.10 ± 0.60 | K | NIST Webbook |
| tf | 214.00 ± 0.80 | K | NIST Webbook |

Correlations

| Information | Value |
|-----------------------------|-------------------------------|
| Property code | pvap |
| Equation | $\ln(P_{vp}) = A + B/(T + C)$ |
| Coeff. A | 1.52491e+01 |
| Coeff. B | -3.98038e+03 |
| Coeff. C | -6.26780e+01 |
| Temperature range (K), min. | 328.72 |
| Temperature range (K), max. | 463.22 |

Sources

| | |
|---|---|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=C1689787&Units=SI |
| The Yaws Handbook of Vapor Pressure: | https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307I |
| Crippen Method: | https://www.chemeo.com/doc/models/crippen_log10ws |

Legend

| | |
|-----------------|-------------------------------------|
| ie: | Ionization energy |
| log10ws: | Log10 of Water solubility in mol/l |
| logp: | Octanol/Water partition coefficient |
| mcvol: | McGowan's characteristic volume |
| pvap: | Vapor pressure |
| rinpol: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tf: | Normal melting (fusion) point |

Latest version available from:

<https://www.chemeo.com/cid/51-733-1/Thiophene-2-1-1-dimethylethyl.pdf>

Generated by Cheméo on 2024-04-29 04:17:18.257585153 +0000 UTC m=+16653487.178162482.

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