

# 1-Isopropyl-6-methylindane

|                             |   |
|-----------------------------|---|
| <b>Inchi:</b>               | InChI=1S/C13H18/c1-9(2)12-7-6-11-5-4-10(3)8-13(11)12/h4-5,8-9,12H,6-7H2,1-3H3 |
| <b>InchiKey:</b>            | VTHXZGHOXXVVSE-UHFFFAOYSA-N   |
| <b>Formula:</b>             | C13H18  |
| <b>SMILES:</b>              | <chem>Cc1ccc2c(c1)C(C(C)C)CC2</chem>  |
| <b>Mol. weight [g/mol]:</b> | 174.28  |
| <b>CAS:</b>                 | 828-97-7  |

## Physical Properties

| Property code | Value           | Unit                 | Source         |
|---------------|-----------------|----------------------|----------------|
| chl           | -7574.30 ± 1.10 | kJ/mol               | NIST Webbook   |
| gf            | 210.04          | kJ/mol               | Joback Method  |
| hf            | -30.54          | kJ/mol               | Joback Method  |
| hfl           | -113.00 ± 1.30  | kJ/mol               | NIST Webbook   |
| hfus          | 17.30           | kJ/mol               | Joback Method  |
| hvap          | 47.66           | kJ/mol               | Joback Method  |
| log10ws       | -4.01           |                      | Crippen Method |
| logp          | 3.681           |                      | Crippen Method |
| mcvol         | 159.410         | ml/mol               | McGowan Method |
| pc            | 2433.84         | kPa                  | Joback Method  |
| tb            | 539.78          | K                    | Joback Method  |
| tc            | 758.37          | K                    | Joback Method  |
| tf            | 290.67          | K                    | Joback Method  |
| vc            | 0.607           | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 380.42 | J/mol×K | 539.78          | Joback Method |
| cpg           | 398.79 | J/mol×K | 576.21          | Joback Method |
| cpg           | 416.03 | J/mol×K | 612.64          | Joback Method |
| cpg           | 432.20 | J/mol×K | 649.07          | Joback Method |
| cpg           | 447.36 | J/mol×K | 685.51          | Joback Method |
| cpg           | 461.58 | J/mol×K | 721.94          | Joback Method |
| cpg           | 474.91 | J/mol×K | 758.37          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0017833 | Paxs | 290.67 | Joback Method |
| dvisc | 0.0011663 | Paxs | 332.19 | Joback Method |
| dvisc | 0.0008383 | Paxs | 373.71 | Joback Method |
| dvisc | 0.0006437 | Paxs | 415.23 | Joback Method |
| dvisc | 0.0005186 | Paxs | 456.74 | Joback Method |
| dvisc | 0.0004331 | Paxs | 498.26 | Joback Method |
| dvisc | 0.0003718 | Paxs | 539.78 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C828977&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C828977&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>                                 |

## Legend

|                 |   |
|-----------------|---|
| <b>chl:</b>     | Standard liquid enthalpy of combustion                    |
| <b>cpg:</b>     | Ideal gas heat capacity                                   |
| <b>dvisc:</b>   | Dynamic viscosity   |
| <b>gf:</b>      | Standard Gibbs free energy of formation                   |
| <b>hf:</b>      | Enthalpy of formation at standard conditions              |
| <b>hfl:</b>     | Liquid phase enthalpy of formation at standard conditions |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions                 |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions           |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l                        |
| <b>logp:</b>    | Octanol/Water partition coefficient                       |
| <b>mcvol:</b>   | McGowan's characteristic volume                           |
| <b>pc:</b>      | Critical Pressure   |
| <b>tb:</b>      | Normal Boiling Point Temperature                          |
| <b>tc:</b>      | Critical Temperature                                      |
| <b>tf:</b>      | Normal melting (fusion) point                             |
| <b>vc:</b>      | Critical Volume   |

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