# 2-Hexene, 4,5-dimethyl-, trans

**Other names:** (E)-4,5-Dimethylhex-2-ene
**Inchi:** InChI=1S/C8H16/c1-5-6-8(4)7(2)3/h5-8H,1-4H3/b6-5+
**InchiKey:** OAVNNZUEVHDCKP-AATRIKPKSA-N
**Formula:** C8H16
**SMILES:** CC=CC(C)C(C)C
**Mol. weight [g/mol]:** 112.21

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 91.82 | kJ/mol | Joback Method |
| hf | -101.79 | kJ/mol | Joback Method |
| hfus | 9.63 | kJ/mol | Joback Method |
| hvap | 32.58 | kJ/mol | Joback Method |
| log10ws | -2.54 | | Crippen Method |
| logp | 2.855 | | Crippen Method |
| mcvol | 119.280 | ml/mol | McGowan Method |
| pc | 2718.33 | kPa | Joback Method |
| rinpol | 743.50 | | NIST Webbook |
| rinpol | 741.00 | | NIST Webbook |
| rinpol | 734.00 | | NIST Webbook |
| rinpol | 735.00 | | NIST Webbook |
| tb | 385.72 | K | Joback Method |
| tc | 565.78 | K | Joback Method |
| tf | 144.84 | K | Joback Method |
| vc | 0.452 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 217.83 | J/mol×K | 385.72 | Joback Method |
| cpg | 280.44 | J/mol×K | 535.77 | Joback Method |
| cpg | 269.06 | J/mol×K | 505.76 | Joback Method |
| cpg | 257.12 | J/mol×K | 475.75 | Joback Method |
| cpg | 244.62 | J/mol×K | 445.74 | Joback Method |

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|---|---|---|---|---|
| cpg | 231.54 | J/mol×K | 415.73 | Joback Method |
| cpg | 291.30 | J/mol×K | 565.78 | Joback Method |
| dvisc | 0.0001887 | Pa×s | 385.72 | Joback Method |
| dvisc | 0.0002641 | Pa×s | 345.57 | Joback Method |
| dvisc | 0.0004036 | Pa×s | 305.43 | Joback Method |
| dvisc | 0.0007016 | Pa×s | 265.28 | Joback Method |
| dvisc | 0.0014851 | Pa×s | 225.13 | Joback Method |
| dvisc | 0.0043531 | Pa×s | 184.99 | Joback Method |
| dvisc | 0.0231611 | Pa×s | 144.84 | Joback Method |

# Sources

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=R293020&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
**dvisc:** Dynamic viscosity
**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