# Dotriacontane, 1-iodo-

**Inchi:** InChI=1S/C32H65I/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-2
**InchiKey:** JXFRLKULJKAXNM-UHFFFAOYSA-N
**Formula:** C32H65I
**SMILES:** CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCI
**Mol. weight [g/mol]:** 576.76

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 276.68 | kJ/mol | Joback Method |
| hf | -626.94 | kJ/mol | Joback Method |
| hfus | 83.04 | kJ/mol | Joback Method |
| hvap | 96.20 | kJ/mol | Joback Method |
| log10ws | -14.17 | | Crippen Method |
| logp | 13.144 | | Crippen Method |
| mcvol | 487.560 | ml/mol | McGowan Method |
| pc | 537.83 | kPa | Joback Method |
| rinpol | 3762.00 | | NIST Webbook |
| rinpol | 3762.00 | | NIST Webbook |
| tb | 1024.70 | K | Joback Method |
| tc | 1278.71 | K | Joback Method |
| tf | 508.46 | K | Joback Method |
| vc | 1.915 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1696.72 | J/mol×K | 1024.70 | Joback Method |
| cpg | 1821.87 | J/mol×K | 1236.37 | Joback Method |
| cpg | 1799.59 | J/mol×K | 1194.04 | Joback Method |
| cpg | 1776.12 | J/mol×K | 1151.70 | Joback Method |
| cpg | 1751.28 | J/mol×K | 1109.37 | Joback Method |
| cpg | 1724.87 | J/mol×K | 1067.03 | Joback Method |
| cpg | 1843.15 | J/mol×K | 1278.71 | Joback Method |
| dvisc | 0.0000116 | Pa×s | 1024.70 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0000161 | Pa×s | 938.66 | Joback Method |
| dvisc | 0.0000239 | Pa×s | 852.62 | Joback Method |
| dvisc | 0.0000388 | Pa×s | 766.58 | Joback Method |
| dvisc | 0.0000712 | Pa×s | 680.54 | Joback Method |
| dvisc | 0.0001556 | Pa×s | 594.50 | Joback Method |
| dvisc | 0.0004434 | Pa×s | 508.46 | Joback Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U406324&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 |