# 4-Methyl-1-(1,2,2-trimethylcyclopentyl)cyclohex-3

**Inchi:** InChI=1S/C15H26O/c1-12-6-10-15(16,11-7-12)14(4)9-5-8-13(14,2)3/h6,16H,5,7-11H2,1-
**InchiKey:** JXGLOXHHKFQUPA-UHFFFAOYSA-N
**Formula:** C15H26O
**SMILES:** CC1=CCC(O)(C2(C)CCCC2(C)C)CC1
**Mol. weight [g/mol]:** 222.37
**CAS:** 943525-66-4

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -4.25 | kJ/mol | Joback Method |
| hf | -318.67 | kJ/mol | Joback Method |
| hfus | 7.47 | kJ/mol | Joback Method |
| hvap | 63.54 | kJ/mol | Joback Method |
| log10ws | -4.64 | | Crippen Method |
| logp | 4.064 | | Crippen Method |
| mcvol | 202.060 | ml/mol | McGowan Method |
| pc | 2361.07 | kPa | Joback Method |
| rinpol | 1715.40 | | NIST Webbook |
| rinpol | 1702.80 | | NIST Webbook |
| rinpol | 1702.80 | | NIST Webbook |
| tb | 669.80 | K | Joback Method |
| tc | 892.10 | K | Joback Method |
| tf | 418.65 | K | Joback Method |
| vc | 0.748 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 590.96 | J/mol×K | 669.80 | Joback Method |
| cpg | 610.99 | J/mol×K | 706.85 | Joback Method |
| cpg | 630.41 | J/mol×K | 743.90 | Joback Method |
| cpg | 649.54 | J/mol×K | 780.95 | Joback Method |
| cpg | 668.73 | J/mol×K | 818.00 | Joback Method |
| cpg | 688.28 | J/mol×K | 855.05 | Joback Method |

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|---|---|---|---|---|
| cpg | 708.53 | J/mol×K | 892.10 | Joback Method |

# Sources

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|---|---|
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C943525664&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

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|---|---|
| **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 |
| **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 |