

1,3-Disilacyclobutane, 1,1,3,3-tetramethyl-

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|----------------------|---------------------------------------------------|
| Other names: | 1,1,3,3-Tetramethyl-1,3-disilacyclobutane |
| Inchi: | InChI=1S/C6H16Si2/c1-7(2)5-8(3,4)6-7/h5-6H2,1-4H3 |
| InchiKey: | JKDNLUGVHCNUTB-UHFFFAOYSA-N |
| Formula: | C6H16Si2 |
| SMILES: | C[Si]1(C)C[Si](C)(C)C1 |
| Mol. weight [g/mol]: | 144.36 |
| CAS: | 1627-98-1 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------------|---------|----------------|
| hvap | 36.70 ± 1.10 | kJ/mol | NIST Webbook |
| ie | 8.56 ± 0.07 | eV | NIST Webbook |
| log10ws | 2.66 | | Crippen Method |
| logp | 2.495 | | Crippen Method |
| sl | 296.27 | J/mol×K | NIST Webbook |
| ss | 296.27 | J/mol×K | NIST Webbook |
| tt | 266.02 ± 0.20 | K | NIST Webbook |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|--------------|
| cps | 216.94 | J/mol×K | 298.15 | NIST Webbook |
| hfust | 10.26 | kJ/mol | 266.00 | NIST Webbook |
| hfust | 10.26 | kJ/mol | 266.00 | NIST Webbook |
| hfust | 10.26 | kJ/mol | 266.02 | NIST Webbook |
| hfust | 10.26 | kJ/mol | 266.02 | NIST Webbook |
| hvapt | 39.48 | kJ/mol | 390.93 | NIST Webbook |
| hvapt | 39.50 | kJ/mol | 391.00 | NIST Webbook |
| sfust | 38.58 | J/mol×K | 266.02 | NIST Webbook |
| sfust | 38.56 | J/mol×K | 266.02 | NIST Webbook |
| svapt | 91.34 | J/mol×K | 390.93 | NIST Webbook |

Sources

| | |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| Crippen Method: | https://www.chemeo.com/doc/models/crippen_log10ws |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=C1627981&Units=SI |

Legend

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|-----------------|---------------------------------------------------|
| cps: | Solid phase heat capacity |
| hfust: | Enthalpy of fusion at a given temperature |
| hvap: | Enthalpy of vaporization at standard conditions |
| hvapt: | Enthalpy of vaporization at a given temperature |
| ie: | Ionization energy |
| log10ws: | Log10 of Water solubility in mol/l |
| logp: | Octanol/Water partition coefficient |
| sfust: | Entropy of fusion at a given temperature |
| sl: | Liquid phase molar entropy at standard conditions |
| ss: | Solid phase molar entropy at standard conditions |
| svapt: | Entropy of vaporization at a given temperature |
| tt: | Triple Point Temperature |

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