# Silane, fluorotrimethyl-

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|---|---|
| **Other names:** | (CH3)3SiF |
| | Fluorotrimethylsilane |
| | Trimethylfluorosilane |
| | Trimethylsilicon fluoride |
| **Inchi:** | InChI=1S/C3H9FSi/c1-5(2,3)4/h1-3H3 |
| **InchiKey:** | CTIKAHQFRQTTAY-UHFFFAOYSA-N |
| **Formula:** | C3H9FSi |
| **SMILES:** | C[Si](C)(C)F |
| **Mol. weight [g/mol]:** | 92.19 |
| **CAS:** | 420-56-4 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hf | -534.56 | kJ/mol | Cheméo Relay (1.0) |
| hvap | 22.96 | kJ/mol | Cheméo Relay (1.0) |
| ie | 10.31 ± 0.04 | eV | NIST Webbook |
| ie | 10.31 ± 0.04 | eV | NIST Webbook |
| ie | 11.00 | eV | NIST Webbook |
| ie | 10.55 ± 0.06 | eV | NIST Webbook |
| logp | 1.791 | | Crippen Method |
| pc | 3152.12 | kPa | Cheméo Relay (1.0, beta) |
| rinpol | 437.00 | | NIST Webbook |
| rinpol | 416.00 | | NIST Webbook |
| rinpol | 416.00 | | NIST Webbook |
| tb | 290.00 ± 1.00 | K | NIST Webbook |
| tc | 421.10 | K | Cheméo Relay (1.0) |
| vc | 0.305 | m3/kmol | Cheméo Relay (1.0) |

# Correlations

| Information | Value |
|---|---|
| Property code | pvap |
| Equation | ln(Pvp) = A + B/(T + C) |
| Coeff. A | 1.57740e+01 |

| | |
|---|---|
| Coeff. B | -3.23513e+03 |
| Temperature range (K), min. | 208.90 |
| Temperature range (K), max. | 309.21 |

# Sources

**Cheméo Relay (1.0, beta):**

| | |
|---|---|
| **The Yaws Handbook of Vapor Pressure:** | https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C420564&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

**Cheméo Relay (1.0):**

# Legend

| | |
|---|---|
| **hf:** | Enthalpy of formation at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **ie:** | Ionization energy |
| **logp:** | Octanol/Water partition coefficient |
| **pc:** | Critical Pressure |
| **pvap:** | Vapor pressure |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **vc:** | Critical Volume |